

OPEN DATA READINESS ASSESSMENT UKRAINE



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Executive Summary

It is widely believed that Open Government Data (OGD) policies can lead to greater transparency, accountability and citizens engagement. It is also believed that they can foster government efficiency, better public service delivery and better policy by evidence-based decision-making. This can not only help realise the Sustainable Development Goals and leverage Good Governance, but also save tax money and ensure efficient use of public resources. In addition to these benefits, OGD might unwheel potentials for innovation, creation of jobs and economic growth. There are many case studies from around the world that provide evidence proving the above mentioned assumptions are realistic. This report aims to explore these assumptions in the context of Ukraine, by analysing the local conditions and circumstances.

Ukraine ranks low on many of the social and economic indicators (see appendix). Ukraine's political, economic, technical, social and organisational context presents a complex environment of opportunities and challenges for Open Government Data Policies. The current economic crisis and the armed conflicts in the eastern part of the country present substantial problems to the Government, the people and the economy of Ukraine, thus solving these issues is a national policy priority.

Although formally a democracy (Unitary semi-presidential constitutional republic) Ukraine's political system in the post-soviet area can be characterised as autocratic, despotic, and corrupt. Widespread corruption, misuse of political power, weak rule of law and impunity lead to a high level of mistrust in public institutions and finally accumulated into the "Euromaidan and 2014 revolution"¹ which forced former president Viktor Yanukovych to step down and flee the country. The people of Ukraine demanded for a fundamental change, for a new democratic area, for a Government that is transparent and accountable, for a political system that guarantees human rights, the rule of law and that abandons corruption and impunity. As a result the new Government of Ukraine committed to an ambitious reform agenda² to establish democratic structures, strengthen the rule of law, leverage Good Governance practice and reduce the high levels of corruption that is endemic through all layers of society.

The findings of this report indicate that Open Data and modern ICT technology can play an important role to support some of these reforms, policies and processes towards democratic society, namely the reforms on Access to Information, Transparency, Accountability, Anti-Corruption, and Citizen Engagement. The Government of Ukraine has already done remarkable progress on what can be called an "Open Government" agenda. The newly adopted Open Data Legislation / regulation are key milestones towards a Government of the 21st Century: "A Government of the people, for the people and by the people".

However, reforms and policies are only the first (although very important) step towards real change. If these reforms and policies will actually lead to desired impacts and change will heavily depend on the actual implementation. This difficult and unstable political and economic situation of Ukraine is presenting severe challenges for the successful implementation of the reform agenda. At the end of the day this change is not only about policy implementation and strengthening the rule of law but - perhaps even more - about a cultural change, a change in people's mind sets on accountability, civic duties, engagement in society and a new relationship between the Government and the citizens of Ukraine. This cultural change can only be successful if all stakeholders work together to ensure the reform agenda is implemented consequently and consistently across Government institutions in a timely manner. OGD can support and

¹ The Ukrainian revolution of February 2014 (also known as the Euromaidan Revolution, see https://en.wikipedia.org/wiki/2014_Ukrainian_revolution

² Ukraine's reform agenda ganges includes reforms on decentralisation, constitution, anti-corruption, public procurement, law enforcement, and many more, see: <http://reforms.in.ua/>

catalyze these processes. To make OGD relevant and useful to achieve the country's main policy priorities and development goals, the Open Data legislation / regulation needs to be operationalised.

The findings of this Open Data Readiness Assessment contain an analysis of the challenges and opportunities for Open Data Initiative in Ukraine and a list of recommended actions. Both aim to inform the work of the new Open Data Working Group (ODWG) at the Cabinet of Ministers that may become the driver and focal point of the creation of an Open Data National Action Plan.

Please note: This is a diagnostic and planning tool, it is not a measurement tool. This tool is intended to provide diagnostics and recommendations for action based on existing good practice elsewhere, but it is not a prescription for Open Data, nor is it a formal evaluation exercise. The output of any diagnostic, even following the guidance in this tool, needs to be carefully and critically considered in the context of the particular circumstances in which it has been made.

Using the tool will not guarantee a successful and sustainable Open Data program on its own; implementation is crucial to ensure success. The purpose of the tool is to provide a plan for action for an Open Data program, as well as initiating a robust and consultative dialogue among relevant stakeholders. In that sense, use of this tool is the beginning of a process and not the end or result of a process. This tool is a 'living' document and will be subject to continuous updating and revision based on experience from actual practice. In addition, other means of assessing readiness for Open Data are available, and this tool is not necessarily the only, or always the most appropriate, in all particular circumstances.

Methodology

This "Open Data Readiness Assessment" was prepared for the Government of Ukraine. It is the product of a joint team of experts representing UNDP.

The purpose of this assessment is to assist the government in diagnosing what actions the government could consider in order to establish an Open Data initiative. This means more than just launching an Open Data portal for publishing data in one place or issuing a policy. An Open Data initiative involves addressing both the supply and the reuse of Open Data, as well as other aspects such as skills development, financing for the government's Open Data agenda and targeted innovation financing linked to Open Data.

The World Bank Open Data Readiness Assessment Framework uses an "ecosystem" approach to Open Data, meaning it is designed to look at the larger environment for Open Data – "supply" side issues like the policy/legal framework, data existing within government and infrastructure (including standards) as well as "demand" side issues like citizen engagement mechanisms and existing demand for government data among user communities (such as developers, the media and government agencies).

This Assessment evaluates readiness based on eight dimensions considered essential for an Open Data initiative that builds a sustainable Open Data ecosystem. Its recommendations assume that an Open Data initiative will address various aspects of an Open Data Ecosystem.

The readiness assessment is intended to be action-oriented. For each dimension, it proposes a set of actions that can form the basis of an Open Data Action Plan. The recommendations and actions proposed are based on global best practices while also incorporating the needs and experiences of the Government of Ukraine to date. Within each dimension, the assessment considers a set of primary questions, and for each, notes evidence that favors or disfavors readiness.

The evaluation of each dimension and primary question is color-coded:

- Green (G)  means there is clear evidence of readiness
- Yellow (Y)  means that evidence of readiness is less clear
- Red (R)  means there is evidence for absence of readiness
- Grey (O)  means insufficient information to assess readiness

When addressing a particular question, evidence of readiness has a "+" sign. Evidence against readiness has a "-" sign. Evidence that has mixed implications or neither favors nor weighs against readiness has an "o" sign. Not all evidence is weighed equally when determining the overall color indicator for a given primary question. Certain factors may weigh more heavily when deciding readiness status.

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List of Abbreviations

ODRA – Open Data Readiness Assessment

UNDP – United Nations Development Programme

UNHCR – United Nations High Commissioner for Refugees

UN IRH – United Nations Istanbul Regional Hub, Regional Centre for Europe and the Commonwealth of Independent States

OGD – Open Government Data

ICT – Information and Communication Technologies

ODWG – Open Data Working Group

OGP – Open Government Partnership

CTO – Chief Technical Officer

CIO – Chief Information Officer

EITI – Extractive Industries Transparency Initiative

IDP – Internally Displaced People

HDI – Human Development Index

SOE – State-owned enterprises

IRM – Independent Reporting Mechanism

CSOs – civil society organisations

NAP – National Action Plan

NODAP – National Open Data Action Plan

EU – European Union

API – Access to Public Information

SSSC&IP – State Service of Special Communications and Information Protection of Ukraine

SSSU – State Statistics Service of Ukraine

CompTIA – Computing Technology Industry Association

CMU – Cabinet of Ministers of Ukraine

CERP-UA – Computer Emergency Response Team of Ukraine

EIF – European Interoperability Framework

IAR – Information Asset Register

Contents

Executive Summary.....	2
Methodology.....	4
Acknowledgements.....	5
List of Abbreviations	6
Objectives of the Assessment.....	8
1. Government Commitment.....	8
2. Policy/Legal Framework.....	15
3. Institutional Structures, Responsibilities and Capabilities within the Government.....	24
4. Government Data Management Policies and Procedures.....	32
5. Demand for Open Data	40
6. Civic Engagement and Capabilities for Open Data	46
7. Funding an Open Data Program.....	51
8. National Technology and Skills Infrastructure	57
Conclusions	61
Appendices.....	65
A. Glossary	65
B. List of meetings and interviews conducted	66
C. Availability of key Datasets	70
D. Action Planning.....	85

Objectives of the Assessment

In general an Open Data Readiness Assessment aims to provide a general overview of where the starting points for Open Data in Ukraine are. In this case the ODRA takes a more practical approach by suggesting specific actions that would be required for the development of a national Open Data strategy and the implementation of possible pilots projects. Specifically it aims to identify where Government, civil society, businesses and the developer community could work together to move Open Data forwards, as well as learn along the way on how to extend Open Data across the Government as a whole.

Therefore each section of the Assessment lists a number of proposed actions that range from more generic to the highly practical, and where possible suggests a specific Agency, or non-government actor to take the lead.

Open Data, as Tim Berners-Lee stated when talking about how “to do Open Data well, it is to start from the top down, from the bottom up, and from the middle outwards”. The actions suggested in this assessment are aimed at making sure those three levels are connected and mutually reinforcing. Only by connecting the efforts on all three levels, will it be possible to move forward with some speed, while keeping the needed resources at a minimum.

Disclaimer: The analysis and recommendations in this Open Data Readiness Assessment are based on information and opinions collected from interviews undertaken and materials provided by the government and other local stakeholders during this study. This Open Data Readiness Assessment is not based on detailed, legal due diligence and does not constitute legal advice. Accordingly, no inference should be drawn as to the completeness, adequacy, accuracy or suitability of the underlying assessment of, or recommendations or any actions that might be undertaken resulting therefrom, regarding the enabling policy, legal or regulatory framework (including institutional aspects thereof) for Open Data in Ukraine.

1. Government Commitment

Importance: Very High

Context: Open Data Programs require the implementation of change - often including legal, institutional, technological and cultural changes - and may affect stakeholders both inside and outside of Government. Thus focused, strong, sustained, political/senior leadership is critical to helping a Government overcome resistance and inertia of all kinds, to helping incentivize actors to make the necessary changes in a timely and effective manner and to achieving the desired objectives and benefits of an Open Data Program.

Questions asked in the assessment

1.1. To what extent is there visible political leadership of Open Data/Open Government? (Importance: Very High)

- + There is visible political commitment from high-level government leaders including the Deputy Prime Minister Hennadiy Zubko and the Speaker of Ukraine's Parliament Volodymyr Groysman in public statements³.

³ Cabinet of Ministers of Ukraine (2014). You must create a common policy of e-governance-Volodymyr Groysman, assessed on 11th September 2015 from: http://www.kmu.gov.ua/control/publish/article?art_id=247273081

- + In 2015 the Prime Minister, Arseniy Yatsenyuk, himself is supportive and interested in the topic and has initiated an Open Data Working Group (ODWG) and nominated independent expert Denis Gursky as his advisor for Open Data.
- + In April 2015, Petro Poroshenko, President of Ukraine, has enacted the Law of Ukraine “On amendments to some laws of Ukraine on access to public information in the form of open data” (2015, № 25, st.192)⁴. These amendments mandate government agencies to “provide public information in the form of Open Data”.⁵
- + In October 2015 a regulation was enacted to spell out the implementation of the aforementioned legislation.
- + Other Government representatives have shown support for Open Government and OGD agenda via public statements, these potential champions include but are not limited to Pavlo Petrenko (Head of The Ministry of Justice of Ukraine), Nataliya Ann Yaresko (Head of The Ministry of Finance of Ukraine). As an example both Members of Parliament, Svitlana Zalishchuk and Dmytro Lubinets participated in the OGP Global Legislative Openness Week conference in Tbilisi, Georgia, on 14th and 15th September 2015.⁶ Both made strong statements in support of using OGD for transparency and accountability within the legislative branch of Government. Mr. Dmytro Lubinets also said: “We are fighting two wars in Ukraine: one against the separatists in the eastern provinces and one against corruption. These are the priorities for our Government.”
- Although there is sufficient high-level political support from top leaders, interviews with public servants from various Ministries conducted for this assessment confirm that the concepts of OGD are relatively new to Ukraine and that there is no coherent understanding of the basic principles among civil servants across Government.

1.2. To what extent is there an established political leadership and governance model for policy and implementation of programs across multiple institutions or across government as a whole? (Importance: High)

- + There are two authorities responsible for the implementation of the aforementioned legislation across multiple institutions: a) the Cabinet of Ministers of Ukraine, lead by Prime Minister Arseniy Yatsenyuk, which has the political mandate to implement the policy on a central top-down basis, and b) the State Agency for E-Governance, which is officially in charge of the implementation and coordination across government agencies.
- + The head of State Agency for E-Governance Alexander Ryzhenko, is a committed supporter of Open Data and has commissioned this ODRA in order to analyse specific local challenges and opportunities.
- o Although the State Agency for E-Governance of Ukraine has mandate to coordinate the implementation of E-Government across Government agencies, the Agency has limited financial and personal resources, and as a relatively new agency it has little practical experience with implementation across Government.
- o There is no national IT strategy, no state CTO and no central agency to coordinate main ICT policies.

1.3. What existing political activities or plans are relevant to Open Data? (Importance: Medium)

⁴ Parliament of Ukraine (2015). On amendments to some laws of Ukraine on access to public information in the form of open data”, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/show/319-19>

⁵ Parliament of Ukraine (2015). On amendments to some laws of Ukraine on access to public information in the form of open data, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/319-19>

⁶ OGP (2015). OGP Global Legislative Openness Week, assessed on September 25th, 2015 from: <http://openparlweek.org/>

- + The Government of Ukraine has committed itself to a set of very ambitious reforms, to improve good governance and the rule of law such as the Constitutional Reform, Decentralization, Election Reform, Judicial Reform and the Reform of Law Enforcement System. Some other reforms are directly related to Open Government, Open Data and Transparency such as: Public Procurement Reform, Lustration and Anti-corruption Reform and Public Administration Reform.⁷
- + In December 2014 President Petro Poroshenko has signed the Decree "On the Strategy for Sustainable Development "Ukraine – 2020", including 62 reforms with the following priorities: reform of the national security and defense system, renewal of authorities and anti-corruption reform, judicial and law enforcement reform, decentralization and public administration reform, deregulation and development of entrepreneurship, healthcare reform and tax reform.⁸
- + The Government is planning to organise an ongoing series of workshops to sensitise high-level to middle-level Government officials to raise awareness and build a common understanding of Open Data. This will be conducted by National Agency of Ukraine on Civil Service and National Academy of Public Administration under the President of Ukraine.⁹
- o The Government of Ukraine is a Candidate Country of the Extractive Industries Transparency Initiative (EITI) and is due to submit the first report in October 2015.¹⁰
- o According to UN E-Government Development Index¹¹ Ukraine ranked 87th of 192 countries and 77th in the UN E-Participation Index. To improve this, the newly formed State Agency for E-Governance will focus on providing 10 priority government services in electronic form and the introduction of web portal of Open Data by 2015 as laid out in the Digital Agenda for Ukraine 2015.
- o Since 2014 a number of Open Data initiatives have been sparked at the Municipal level and District level (Oblast). These initiatives are initiated and mostly driven by individual leaders/champions but lack of interaction between them, and with the national level, so at this point they appear to be isolated and with no coordination.

1.4. How does the wider political context of Ukraine help or hinder Open Data? (Importance: High)

- + Developments in Ukraine in the winter of 2013/2014 and subsequent changes in the governance systems of the country have ushered in an immense appetite for accountability and transparency in government at all levels. The proactive stances of many citizens testify to the readiness for engagement in decision-making and devotion of time and effort to collaborative resolution of common challenges. Electronic services, information at your fingertips, and the ability to operate Open Data are all on the agenda for the new governance systems in Ukraine.
- o Although freedom of the press in Ukraine is considered to be among the freest of the post-Soviet states other than the Baltic states. Freedom House classifies the Internet in Ukraine as "free" and the press as "partly free". Press freedom has significantly improved since the Orange Revolution of 2004. This is, however, in contrast with the large degree of centralisation of the Media Market,

⁷ National Reforms Council (2014). Website allows to track the progress on all major reforms, assessed on August 12th, 2015 from: <http://reforms.in.ua/en>

⁸ President Administration (2014). Strategy for Sustainable Development of Ukraine until 2020, assessed on August, 12th, 2015 from: <http://www.president.gov.ua/en/news/glava-derzhavi-zatverdiv-strategiyu-stalogo-rozvitu-ukrayiny-34506>

⁹ National Academy of Public Administration (2015). ICT presented at the National Academy on the conference "Information Society Day - 2015", assesed on August 12th, 2015 from:
<http://www.academy.gov.ua/?lang=ukr&tip=osn&page=2&tipn=News&newsid=250&PageNumber=7>

¹⁰ EITI (2013). Candidate Country, assessed on August 12th, 2015 from: <https://eiti.org/ukraine>

¹¹ UN (2014). E-Government Development Index, assessed on August 12th, 2015 from:
<http://unpan3.un.org/egovkb/en-us/Data/Country-Information/id/180-Ukraine>

where most publishing houses and most broadcasters belong to a small number of Media Oligarchs. A 2012 report outlines the findings that ultimately found serious corruption issues and other problems, including: “An environment of corruption and lack of transparency that impacts the press, the judiciary and society as a whole; Lack of independence and pluralism of broadcasters and the politicisation of news coverage; and frequent cases of impunity and lack of prosecution for those who attack the media”.¹²

- The new Government of Ukraine will be held to account on its ambitious promises to introduce democratic standards, strengthen the rule of law, enhance law enforcement and leverage transparency and accountability to combat corruption. The idea of lustration is gaining momentum in Ukraine. A recent survey shows that nearly 80 percent of respondents support the policy. Lustration refers to a policy that seeks to cleanse a new regime from the remnants of the past. The process involves screening new officials (elected or appointed) for involvement in the former regime and sets some consequences if they are found to have been involved.¹³
- An Amnesty International Report 2014/15 states: “Violence resulting from the protests in the capital Kiev and later in eastern Ukraine escalated into a civil conflict with Russian involvement. Violations by police, including torture and other ill-treatment as well as abusive use of force during demonstrations, continued with near-total impunity for the perpetrators, while investigations into such incidents remained ineffective. Abductions of individuals were carried out, particularly by pro-Russian paramilitaries in the occupied Autonomous Republic of Crimea and by both warring sides in eastern Ukraine affected by conflict. Both sides violated the laws of war”.¹⁴
- The ongoing armed conflict in the Donetsk and Luhansk Oblasts (Regions) of Ukraine, presents a severe threat to political stability and human rights and has caused very negative results to the economy. According to the UNHCR in Ukraine, there are almost 1.5 million Internally Displaced People (IDP), due to the in Russian annexation of the Crimea and the armed conflicts between separatist groups and the Government of the Ukraine in eastern Ukraine 2015.
- Ukraine ranks 83th in the Human Development Index (HDI).¹⁵ Ukraine’s economic fortunes looked bleak even before the Maidan. A year and a half of war and revolution have only compounded the problems. Industrial production has collapsed as fighting shut down mines and factories in the country’s east. GDP fell by nearly 18% year-on-year in the first quarter of 2015, worse than even the pessimistic projections. In April, inflation topped 60% due mostly to utility price hikes. Though Ukraine’s currency, the hryvnia, has rebounded a bit and stabilised after crashing in February, efforts to prop it up have depleted the government’s coffers, leaving Ukraine with less than \$10bn in foreign reserves. Now the country is dependent on the International Monetary Fund (IMF) and other international donors to keep it afloat.
- Corruption is perceived as a widespread and growing problem in Ukrainian society. In 2014's Transparency International Corruption Perceptions Index Ukraine was ranked 142nd out of the 175 countries investigated (118th out of 179 in 2007).¹⁶
- The rise of few but very influential Ukrainian oligarchs is related to the rapid processes of privatization of state-owned assets after Ukraine's independence in 1991. In 2008, the combined

¹² Freedom House (2012). Press Freedom: An Own Goal for Ukraine, assessed January 20th, 2015 from:

¹³ The Washington Post (2014). What is lustration and is it a good idea for Ukraine to adopt it?, retrieved January 20th, 2015 from: <https://www.washingtonpost.com/blogs/monkey-cage/wp/2014/04/09/what-is-lustration-and-is-it-a-good-idea-for-ukraine-to-adopt-it/>

¹⁴ Amnesty International (2015). Amnesty International Report 2014/15, assessed on August 12th, 2015 from: <https://www.amnesty.org/en/countries/europe-and-central-asia/ukraine/>

¹⁵ UNDP (2014). Human Development Index (HDI), assessed on August 12th, 2015 from: <http://hdr.undp.org/en/content/human-development-index-hdi>

¹⁶ Transparency International (2014). Corruption Perceptions Index, assessed on August 12th, 2015 from: <https://www.transparency.org/cpi2014/results>

wealth of Ukraine's 50 richest oligarchs was equal to 85% of Ukraine's GDP¹⁷. Although direct influence on Ukraine's politics remains uncertain, it is clear that this group of people are at the core of the country's immense problems with corruption.

- State-owned enterprises (SOEs) continue to represent a significant share of Ukraine's economy, and play a dominant role in sectors such as railway, transport, utilities, energy and telecommunications. According to a World Bank analysis performance evaluations are not conducted for a substantial number of SOEs which seriously undermines the effectiveness of oversight. In early 2015 the new Government has announced (Resolution of the Cabinet of Ministers No. 271 as of May 12) the privatization of more than 300 state-owned enterprises.¹⁸

1.5. What is the country's position in relation to the Open Government Partnership? (Importance: High?)

- + The Government of Ukraine has joined the OGP in 2011 and committed to a series of actions in the second National Action Plan.¹⁹ The plan spells out one specific commitment on open data: "Developing and submitting to the Cabinet of Ministers of Ukraine in due course a draft law on amending some legislative acts of Ukraine on access to information in the form of open data and reuse of information". Several other commitments are related to Transparency, Accountability, Anti-Corruption, Access to Information and Citizen Engagement.
- The Independent Reporting Mechanism (IRM) Progress Report 2012-13²⁰ states that out of the 30 commitments 23 show a clear relevance to an OGP Value, and 13 to have moderate or transformative potential impact. The IRM concludes that in almost every section of the National Action Plan, there are bottlenecks that need to be addressed/implemented in order to make further progress. The report concludes that substantive improvements are needed in the fields of:
 - Engaging with civil society in policy development
 - Providing access to information
 - Combating corruption, and
 - Reforming administrative services and e-governance
- On the process, the IRM states that CSOs had difficulties communicating with the Government during the first few months of OGP, due to lack of a central OGP co-ordinating body. This changed in March 2012, when the Prime Minister appointed two high-ranking officials to coordinate the process. Soon after, a multi stakeholder working group completed the action plan. The result was seen as an example of successful cooperation between the Government and civil society. The OGP process slowed down with the Developments in Ukraine in the winter of 2013/2014. The process was recently reinitiated in early 2015.
- The 2014-2015 OGP Action Plan²¹ was adopted after a series of consultative roundtables during 2014 in Lviv, Kherson, Dnipropetrovsk, and Kyiv, which gathered more than 240 participants, over three quarters of whom were civic activists. As the result of this process, the Action plan has been

¹⁷ Kuzio, Taras (1 July 2008). "Oligarchs wield power in Ukrainian politics". Eurasia Daily Monitor 5 (125).

¹⁸ UNIAN (2015). Ukrainian government approves privatization of more than 300 state-owned enterprises, assessed on August 12th, 2015 from: <http://www.unian.info/economics/1077317-ukrainian-government-approves-privatization-of-more-than-300-state-owned-enterprises.html>

¹⁹ OGP (2014). 2nd National Action Plan, assessed on August 12th, 2015 from: <http://www.opengovpartnership.org/country/ukraine>

²⁰ OGP (2014). Independent Reporting Mechanism (IRM) Progress Report 2012-13, assessed on August 12th, 2015 from: <http://www.opengovpartnership.org/files/ukraineirmreportpubliccommentversionengpdf/download>

²¹ Parliament of Ukraine (2014). On approval of the Action Plan Initiative "Partnership" Open Government "in 2014-2015 years, assessed on November 1st 2015 from: <http://zakon2.rada.gov.ua/laws/show/1176-2014-%D1%80>

approved and the composition of the OGP coordination council has been updated. The report on OGP Action plan implementation has been presented during the OGP Summit in Mexico (October 2015), according to which 4 tasks out of 26 were accomplished (among them, approval of legislation and others related to the open data), 19 of 26 are in progress and beyond the deadlines.

Assessment on the 1st dimension: Senior leadership

Question area	Importance	Assessment Rating	Commentary
Political Leadership	Very High	GREEN	Visible, official support for Open Data at the very top levels of Government (Prime Minister, Cabinet of Ministers). Visible support among leadership of key Ministries and Agencies (including: the Ministry of Justice of Ukraine, The Ministry of Economic Development and Trade of Ukraine; the Ministry of Infrastructure of Ukraine; the Ministry of Regional Development, Building and Housing of Ukraine; Ministry of Finance of Ukraine; Ukraine State Service of Geodesy, Cartography and Cadastre) with commitments to support Open Data.
Political Structure	High	YELLOW	There is little experience with implementing ICT initiatives across-government. However together the Cabinet of Ministers and the State Agency for E-Governance are well positioned and have mandate to implement the new Open Data Regulation.
Existing Activities	Medium	GREEN	The Government of Ukraine has committed to a series of very ambitious reforms, some of them are supportive for Open Data, Transparency and Accountability Anti-Corruption and Citizen engagement. In addition the Government has committed to international initiatives such as the Open Government Partnership and EITI.
Wider Context	High	RED	There is evidence of the Government's commitment to an ambitious reform agenda, including Transparency, Accountability and the rule of law. However the Government is facing severe problems including the armed conflicts in the east, the economic crisis and ongoing high-levels of corruption.
OGP Commitment	High	YELLOW	The OGP process in Ukraine is staggering, since the 2014 Euromaidan revolution. According to the IRM on the implementation of the second action plan only 4 tasks out of 26 were accomplished (among them, approval of legislation and others related to the open data), 19 of 26 are in progress and beyond the deadlines. The level of civil society engagement in the process can be described as limited. The new Government has yet to prove that it will take the OGP process more seriously in the future.
Overall	Very High	YELLOW	As a result of the Euromaidan Revolution in 2014 citizen demanded for the new Government to become more transparent, accountable and to take serious actions against corruption. In response the new Government of Ukraine has set an ambitious reform agenda to leverage transparency, accountability, access to information and open data. At the same time corruption is perceived as widespread across Government and society. The challenges are not only to ensure coherent implementation of the reform agenda and strengthen the rule of law and law enforcement, but also to change the mindset of people and to

			establish a culture of transparency and accountability. Although Ukraine has made commitments to international initiatives such as OGP and EITI both process were almost stalled during the 2014 crisis. The new Government has yet to prove that it will take the OGP process more seriously in the future. The Government will be held to account on its ability to actually implement its ambitious promises and reform agenda. Although Open Data is introduced to higher level public servants, there is a lot of confusion about what it actually means. More sensitisation and capacity development is needed to establish a common understanding of the basic concepts and implications of Open Data.
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Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A1.01	Operationalise the Open Data Working Group	Open Data Working Group, Cabinet of Ministers	Immediate	The Open Data Working Group (ODWG) is formalised with mandate, however it must be operationalised by giving itself a clear structure. A Governance model should be established and transparently published. The WG might nominate a "Steering Committee" (SC) as a small and agile task force. Many members of the ODWG will not have the time to be involved in all activities, so the SC should be responsible for drafting the action plan and planning coordinating activities. The SC must regularly inform the other members of the ODWG. Decisions must be taken by the whole WG not the SC.
A1.02	Sensitisation activities in public sector	Open Data Working Group, Cabinet of Ministers	Short to medium term	Findings of this assessment indicate that there is little knowledge about the concepts of OGD among civil servants, thus a sensitisation program must be established and implemented across Government to scale and deepen the understanding. This sensitisation program should not only explain the concepts of Open Data but also entail a section on the benefits of Open Data as a set of arguments "why" the Government should open up its data and "how" this is useful for the Government itself, for citizens, and for other stakeholders.
A1.03	Improve OGP commitments and deepen OGP process	Open Data Working Group, Cabinet of Ministers	Immediate	Ukraine Government should consider to commit to more ambitious Goals related to OGD, transparency, accountability and citizen engagement in its current OGP National Action Plan (NAP). Commitments in the NAP might include OGD specific commitments in the areas of Fiscal Transparency, Legislative Transparency, Access to Information and Anti-Corruption. In addition to the commitments in the NAP, the Government should also review the OGP process in Ukraine and take actions so

				that it is more inclusive and that civil society and other stakeholders are more effectively engaged in the process of formulating the NAP and monitor its implementation.
A1.04	Adopt the International Open Data Charter	Open Data Working Group, Cabinet of Ministers	Immediate	Ukraine can become an early adopter and champion by linking the activities of the development and implementation of the NODAP as commitments in adopting the Open Data Charter. This will give the Government's reform agenda the international visibility it deserves. In addition the Government should also sign the OGP Declaration on the Post-2015 Sustainable Development Goals to underpin its commitment.

2. Policy/Legal Framework

Importance: High

Disclaimer: The preliminary analysis and recommendations in this section are based on information and opinions collected from interviews undertaken and materials provided by the government and other local stakeholders during this study. This section is not based on detailed, legal due diligence and does not constitute legal advice. Accordingly, no inference should be drawn as to the completeness, adequacy, accuracy or suitability of the underlying assessment, or recommendations, or any actions that might be undertaken resulting therefrom, regarding the enabling policy, legal or regulatory framework for Open Data in the Ukraine. It is therefore recommended that, prior to undertaking any legal action to address any legal assessment issue raised herein, a formal legal due diligence be performed by competent, locally qualified legal counsel, preferably assisted by international legal experts with relevant experience and knowledge of these areas.

Context: The long-term success and sustainability of an Open Data Program is greatly impacted by the policy and legal framework that exists. Open Data requires that a range of policy and legal issues be addressed – for example, with respect to the licensing of data reuse. It is important to identify at an early stage the existing policies, laws and regulations with respect to a core set of issues, and to identify actual or perceived obstacles in order that policy or legal change can be initiated early if essential.

Questions asked in the assessment

2.1. What is the legal and policy framework for the protection of personal privacy? (Importance: Very High)

- + The legal and policy framework for the protection of personal privacy is based on: Article 32 of the Constitution²², the Law on Protection of Personal Data, Judgments of the Constitutional Court

²² Article 32: "No one shall be subject to interference in his or her personal and family life, except in cases envisaged by the Constitution of Ukraine. The collection, storage, use and dissemination of confidential information about a person without his or her consent shall not be permitted, except in cases determined by law, and only in the interests of national security, economic welfare and human rights. Every citizen has the right to examine information about himself or herself, that is not a state secret or other secret protected by law, at the bodies of state power, bodies of

(notably No. 2-pn/2012 of 20 January 2012 and No. 5-зп of 20 October 1997), bylaws under the Law on Protection of Personal Data developed by the Ombudsman (DPA in Ukraine since 2014).

- + In addition there are several sector specific regulations: A number of laws concern privacy and data protection by regulating specific sectors. According to legal experts interviewed for this assessment some of these sector specific regulations might present risks for privacy and data protection, notably the Law on Unified State Demographic Register.
- + Ukraine first passed personal data protection legislation in June 2010 with the Law of Ukraine On Personal Data Protection from 01.06.2010 number 2297-VI²³. This law has been amended by Law of Ukraine On amendments to some legislative acts of Ukraine concerning improvement of the system of personal data protection from 03.07.2013 number 383-VII²⁴. The Data Protection Law essentially complies with EU Data Protection Directive 95/46/EC.
- + With amended 383-VII the state agency in charge of personal data protection matters in Ukraine changed from the State Service of Ukraine on Personal Data Protection (which is now abolished) to the Ombudsman. The new data protection regulations require data controllers to (1) notify data subjects of the processing of their personal data within 30 working days, and (2) notify the Ombudsman of the processing of "high risk data" that constitute a special risk to the rights and freedoms of data subjects. The Ombudsman may issue warnings to data controllers for failure to notify the Ombudsman of the processing of "high risk data." In addition, the new data protection regulations provide for monitoring and audit compliance procedures pursuant to which the Ombudsman may conduct announced and unannounced audits.
- o Ukrainian Parliament Commissioner for Human Rights Valeriya Lutkovska is the appointed Ombudsperson responsible for both Protection of Privacy and Access to Information. The Ombudsperson started her work as a watchdog for the protection of personal data in January 2014.
- o General data protection issues are also regulated by the Constitution of Ukraine dated 28 June 1996, the Civil Code of Ukraine dated 16 January 2003 No 435 IV, the Law of Ukraine "On Information" dated 2 October 1992 No 2657 XII, Law of Ukraine On Protection of Information in the Information and Telecommunication Systems from 05.07.1994 number 80/94 VR²⁵ and some other legislative acts.
- o Legal Experts (including Dmytro Kotliar and others) interviewed for this assessment noted that the Ombudsperson and her office have little resources to effectively safeguard the Protection of Privacy and handle all issues around Access to Information requests. For personal data protection the Ombudsman has clear mandate to control enforcement of the law, issue binding instructions and propose sanctions (imposed by court). It's a unique scope for the Ombudsman, because for all other human rights it can only issue recommendations.
- o There are general rules that prohibit dissemination of "confidential information" which includes personal data and confidential information of legal persons (Access to Public Information Law and Law on Information). In addition, there is very specific rule in new Article 10-1 (Open Data) of the

local self-government, institutions and organisations. Everyone is guaranteed judicial protection of the right to rectify incorrect information about himself or herself and members of his or her family, and of the right to demand that any type of information be expunged, and also the right to compensation for material and moral damages inflicted by the collection, storage, use and dissemination of such incorrect information."

²³ Parliament of Ukraine (2011). Law of Ukraine On Personal Data Protection, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/2297-17>

²⁴ Parliament of Ukraine (2013). Law of Ukraine On amendments to some legislative acts of Ukraine concerning improvement of the system of personal data protection, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/383-18>

²⁵ Parliament of Ukraine (2014). Law of Ukraine. On Protection of Information in the Information and Telecommunication Systems, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/show/80/94-%D0%Б2%D1%80>

API Law on publication of datasets that include personal data, it is allowed only under specific conditions. The latter provision is in fact quite progressive, it is rarely spelled out in such explicit manner. However there is not enough evidence that existing policies, laws and practices effectively safeguard the Protection of Privacy in practice across Government.

2.2. What rights of access to information exist? (Importance: Very High)

- + The Right to Access Information is regulated by Article 34 of the Constitution²⁶ and the Law of Ukraine On Access to Public Information from 13.01.2011 number 2939-VI²⁷ and the Law on Information (revised in 2011), which includes general right to information as well. According to the Global Right to Information Rating Ukraine scores 108 out of 150 points, ranking 19th of 102 countries.²⁸
- + The law was amended by the Law of Ukraine On amendments to some laws of Ukraine on access to public information in the form of open data from 09.04.2015 number 319-VIII.²⁹
- + Citizens can file requests under the Right to Access Information mechanism. Requests can be filed orally, in writing, electronically or by any other means. The law sets minimum requirement to an information request (should include name and contacts of the requester, description of requested information, signature and date for written requests). The law also stipulates that each agency must have a representative to manage implementation of the law and answer to Right to Access requests.
- o There is no central public agency responsible for enforcement of the Law. A draft law (no. 2913) is pending in the parliament proposing to assign function of the supervisory authority to the Ombudsman institution (including powers to issue binding decisions and impose sanctions). This pending proposal will provide similar powers to the Ombudsman for access to information right enforcement, as regulated by the 2011 Access to Public Information Law (API). If adopted, the new mandate will cover Open Data requirements that are in the API Law - the Ombudsman will monitor and supervise enforcement of the requirements as to proactive publication of open data and its provision on request (Articles 10-1 and 15 API Law).
- o Ukrainian Parliament Commissioner for Human Rights Valeriya Lutkovska is the appointed independent Ombudsman responsible for both Protection of Privacy and Access to Information. Her office is located under the Ukraine Parliamentary Commission of Human Rights.
- As mentioned above in relation to privacy protection, very low resources and capacities (lack of staff, low salaries, high turnover of staff, etc.) of the Ombudsman Office prevent effective implementation of the new mandate - both with regard to personal data protection and access to information.
- o The Office of the Ombudsman has not published any consolidated reports for all information-

²⁶ Article 34: "Everyone is guaranteed the right to freedom of thought and speech, and to the free expression of his or her views and beliefs. Everyone has the right to freely collect, store, use and disseminate information by oral, written or other means of his or her choice. The exercise of these rights may be restricted by law in the interests of national security, territorial indivisibility or public order, with the purpose of preventing disturbances or crimes, protecting the health of the population, the reputation or rights of other persons, preventing the publication of information received confidentially, or supporting the authority and impartiality of justice."

²⁷ Parliament of Ukraine (2013). Law of Ukraine On Access to Public Information, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/2939-17>

²⁸ Access Info (2014). Global Right to Information Rating Ukraine, assessed on August 12th, 2015 from: http://www.rti-rating.org/view_country?country_name=Ukraine

²⁹ Parliament of Ukraine (2013). Law of Ukraine On amendments to some laws of Ukraine on access to public information in the form of open data, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/319-19>

holders. But individual agencies produce reports on the information requests they process (e.g. the Government's Secretariat, Ministry of Interior, Ministry of Justice, and others). The Ombudsman has no duty to produce such reports, except for reports on information requests received by the Ombudsman itself. Thus the information is scattered and it is hard to tell how many requests have been issued and what kind of information was requested. There is also no official reports about the performance of Government agencies in answering to requests and what information is released in response to requests using these mechanisms.

- Experts interviewed for this assessment indicate that, although the Right to Access Information law is strong, in practice the law is not implemented properly, and that while some agencies show positive attitude to respond to requests, other agencies are more reluctant, making arbitrary use of exceptions to justify denied access. Journalists, media organisations, and CSOs interviewed for this assessment reported that their Requests to Access Information are denied on a regular basis, especially in cases where potentially sensitive information about cases of corruption is requested.

2.3. What is the legal and policy framework for data security, data archiving and digital preservation? (Importance: High)

- + Official policies, laws or regulations that address data security, data archiving and digital preservation are the Law of Ukraine On the National Archival Fond and Archival Institutions³⁰ and Law of Ukraine On Electronic Record and Electronic Records Circulation.³¹
- + The State Service of Special Communications and Information Protection of Ukraine (SSSC&IP)³² is responsible for policy on data security. SSSC&IP has extensive experience and established procedures with data security.
- + The State Archival Service of Ukraine³³ is responsible for policy on data archiving and digital preservation.
- + Procedures or mechanisms are in place to address data security including the Regulation "On approval of rules to ensure the protection of information in information, telecommunications and information and telecommunication systems", from 29.03.2006 number 373.³⁴
- There is no evidence that existing laws, policies and procedures on data security, data archiving and digital preservation are implemented across Government agencies.

2.4. What is the policy on the ownership and licensing of government data? (Importance: Very High)

- + The Law on Information, as revised in 2011, rejected the idea of ownership to information as such, as it contradicts the essence of information - it is an object of the human right, not subject to civil law concept of ownership. This was a significant achievement, because before in practice Government agencies often referred to their "ownership" of information when denying access to information they held. Nevertheless Government bodies hold "ownership" of intellectual property rights, in products produced with Government money. Within the scope of this Assessment it was

³⁰ Parliament of Ukraine (1993). Law of Ukraine On the National Archival Fond and Archival Institutions, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/3814-12>

³¹ Parliament of Ukraine (2003). Law of Ukraine On Electronic Record and Electronic Records Circulation, assessed on August 12th, 2015 from: <http://zakon1.rada.gov.ua/laws/show/851-15>

³² State Service of Special Communications and Information Protection of Ukraine (2015), assessed on August 12th, 2015 from: <http://www.dstszi.gov.ua/dstszi/control/en/index>

³³ State Archival Service of Ukraine (2015). assessed on August 12th, 2015 from: <http://www.archives.gov.ua/>

³⁴ Parliament of Ukraine (2013). Regulation On approval of rules to ensure the protection of information in information, telecommunications and information and telecommunication systems, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/373-2006-%D0%BF>

not possible to clarify if these intellectual property rights remain with the individual agency or the Government as a whole.

- There are cases when software, e.g. databases, and information therein was transferred to private companies and/or who received royalties for allowing the state to use it).
- Internationally recognised standard open licenses such as Creative Commons CC-0 or CC-BY are available and localised to the Ukrainian judiciary.³⁵ However the use of open licenses is relatively new to Ukraine and thus not well established.
- Most Government agencies have no clear Copyright statement or other Terms of Use that would provide specific information under which conditions the information provided might be reused. Many agencies have a simple statements in the footer of their website, like: “© Cabinet of Ministers of Ukraine” or “© SSC of Ukraine, 1998-2015” or “When using the site materials reference to CSIRP and NFC obligatory! © CSIRP and NFC, 2008-2014rr.” Such unclear statements represent a legal uncertainty to potential reusers.³⁶
- Before the Open Data Law there were no established policies for licensing government hold information or data, in practice Government agencies decided how to license or permit the release/use of their data somehow arbitrary at the individual agency level.
- + Article 10-1.2 of the new Open Data Law (Amendments in the Access to Public Information Law) clearly mandates for information and data must be available freely for reuse (even if it does not mention an “open licence” as such).

2.5. To what extent is government data sold by agencies? (Importance: High)

- + Government hold information and data is generally free of charge. Most agencies consider all information they publish as public information which should be available for reuse free of charge.
- However some agencies have established their own scheme for charging for specific types of information. For example the State Archival Service of Ukraine has a list of requests which will be provided on a free-of-charge basis and a list of requests provided by the State Archives on payment basis.³⁷ Other agencies that sell data include the State Land Surveying and Cadastre Agency selling access to data in the State Land Cadastre, the Ministry of Justice provides paid access to certain information in the Company Register and in the Register of Immovable Property Rights; the State Statistics Services sells statistics and services on its collection and analysis.
- According to the order of the Ministry of Justice of Ukraine “On approval of the paid services of state departments of civil registration”³⁸ state departments of civil registration can provide paid services.

2.6. What other policies/laws exist that may have significant impact on Open Data? (Importance: High)

- + The “Law of Ukraine On amendments to some laws of Ukraine on Access to Public Information in the form of Open Data, from 09.04.2015 number 319-VIII,”³⁹ (for reasons of practicality here

³⁵ Creative Commons (2015). Working group on adaptation Creative Commons licenses to Ukrainian legislation, assessed on August 12th, 2015 from: <http://creativecommons.org.ua/> and CC-BY 4.0 and <https://creativecommons.org/licenses/by/4.0/deed.uk>

³⁶ See as examples: <http://www.kmu.gov.ua/> and <http://www.ukrstat.gov.ua/>

³⁷ State Archival Service of Ukraine (2014). Requests by Citizens, assessed on August 12th, 2015 from: <http://www.archives.gov.ua/Eng/Requests/index.php>

³⁸ Parliament of Ukraine (2013). On approval of the paid services of state departments of civil registration, assessed on August 12th, 2015 from: <http://zakon1.rada.gov.ua/laws/show/z1380-10>

³⁹ Parliament of Ukraine (2013). Law of Ukraine On amendments to some laws of Ukraine on access to public

referred to as the Open Data Law) represents a strong and supportive piece of legislation for OGD. The Law is not an autonomous act, its role was to amend other laws. Relevant provisions now became part of the respective laws - in addition to the API Law, the April 2015 law also amended the Law on State Registration of Legal Persons and Private Entrepreneurs, Law on TV and Radio Broadcasting, Law on Public Procurement, Law on Management of State Property, Law on Registration Rights to Immovable Property, Law on Regulation of Urban Planning Activity, Law on Civic Associations, Law on Higher Education. The amendments explicitly stipulated that certain government databases should be accessible in open data format (regardless of the fact that they contain) - Company Register, Register of Broadcasters, Register of State Property, Register of Rights to Immovable Property, urban planning documents, Register of Civil Associations, information on public procurement, Register of Educational Institutions and any more.

- + The Open Data Law and the following Resolution №835 dated October 21st, 2015 "On approval of the Regulation on Data Sets to be Published in the form of Open Data" mandate for the government data holders to publish and ensure further updating of their data sets on their official web-sites, and, when effectively established, on the State Open Data Portal at data.gov.ua.
- + The Government of Ukraine has drafted and enacted a series of very ambitious legislative reforms in the consequences of the EuroMaidan protests. Some of these reforms are highly relevant for the implementation of an Open Data Initiative. The following laws present a positive legal framework for Open Data:
 - Law of Ukraine On the Principles of State Anti-Corruption Policy in Ukraine (the Anti-Corruption Strategy) for 2014 – 2017, from 14.10.2014 № 1699-VII⁴⁰
 - Law of Ukraine On the National Anti-Corruption Bureau of Ukraine, from 14.10.2014 № 1698-VII⁴¹
 - Law of Ukraine On Government Procurement, from 10.04.2014 № 1197-VII⁴²
 - Law of Ukraine On amendments to some laws of Ukraine to provide information on state registration of rights and encumbrances from the State Register of Rights to Immovable Property from 16.04.2014 number 1219-VII⁴³
 - Law on Openness of Public Funds Use⁴⁴ (adopted in Feb 2015) stipulated publication of data on the use of public funds (state and local budgets, expenses of public companies) on a single web portal and online publication in real time of all Treasury transactions. The law specifically stated that such information should be published in Open Data (machine-readable) format.
 - Law on Corruption Prevention⁴⁵ (adopted in October 2014, enacted in 2015) provided that the database of public officials' declarations on their and their family members assets, income, expenses and financial liabilities should be published online (with a limited number of exceptions), including in a machine-readable format.

information in the form of open data, assessed on August 12th, 2015 from:

<http://zakon4.rada.gov.ua/laws/show/319-19>

⁴⁰ Parliament of Ukraine (2014). Law of Ukraine On the Principles of State Anti-Corruption Policy in Ukraine, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/en/1699-18>

⁴¹ Parliament of Ukraine (2014). Law of Ukraine On the National Anti-Corruption Bureau of Ukraine, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/en/1699-18>

⁴² Parliament of Ukraine (2014). Law of Ukraine On Government Procurement, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/en/1197-18>

⁴³ Parliament of Ukraine (2014). Law of Ukraine On amendments to some laws of Ukraine to provide information on state registration of rights and encumbrances from the State Register of Rights to Immovable Property, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/1219-18>

⁴⁴ PLEASE ADD

⁴⁵ PLEASE ADD

- + There are also older laws that present a generally friendly framework for Open Data, including:
 - Law of Ukraine On ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters from 06.07.1999 number 832-XIV⁴⁶
- The protection of state secret are regulated by the Constitution of Ukraine, the Law of Ukraine On Information, and the Law of Ukraine On State Secret from 10.03.1994 number 3856-XII⁴⁷ and the Law of Ukraine On protection of information in information and telecommunication systems, from 05.07.1994 number 80/94-BP⁴⁸.

Assessment on the 2nd dimension: Policy/Legal framework

Question area	Importance	Assessment Rating	Commentary
Privacy protection framework	Very High	RED	Right to privacy and protections are recognized in the Constitution and laws in principle. While regulation and process for the anonymisation of data exist, implementation is inconsistent. Only few key data-owning agencies have established robust practices for anonymizing personal information prior to publication. There is not enough evidence that existing policies and practices safeguard the protection of privacy in other agencies.
Access to information framework	Very High	YELLOW	The Right to Access to Information is recognised in the Constitution and specific legislation. Namely the Access to Public Information law, guarantees the right to access, however in practice implementation is inconsistent and not widely enforced. There is a practice of pro-active publication, and all agencies public proactively most of the information required by the law, with different level of consistency however. In practice some Government authorities make arbitrary use of exceptions to limit or deny access to information requested.
Data security framework	High	YELLOW	The issue of database, network and systems protection and security are addressed in laws/regulations, but there are questions about the robustness of their implementation across Government agencies.
Ownership & licensing framework	Very High	YELLOW	Government bodies hold “ownership” of intellectual property rights, in products produced with Government money. Within the scope of this Assessment it was not possible to clarify if these intellectual property rights remain with the individual agency or the Government as a whole. Article 10-1.2 of the new Open Data Law (Amendments in the Access to Public Information Law) mandates for information and data to be available freely for reuse, even if no specific open license is mentioned. A central policy for the use of an

⁴⁶ Parliament of Ukraine (1999). Law of Ukraine On ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/832-14>

⁴⁷ Parliament of Ukraine (1994). Law of Ukraine On State Secret, assessed on August 12th, 2015 from: http://www.sbu.gov.ua/sbu/control/en/publish/article;jsessionid=1D911B4565AE6A5B24E7FE7ABA076C72?art_id=82388&cat_id=42924

⁴⁸ Parliament of Ukraine (2014). Law of Ukraine On protection of information in information and telecommunication systems, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/show/80/94-%D0%B2%D1%80>

			open license for all Government information and data is recommended.
Revenue based on data	High	YELLOW	Although most published Government data is available free of charge, some agencies have established their own pricing scheme for charging for some of their data. There is no cross-government policy preventing the sale of government-held data or ensuring consistent policies on charging for data based on the marginal costs of distribution. A clear and central policy for charging for Government information and data needed.
Other relevant policy frameworks	High	GREEN	The Government of Ukraine has enacted a series of very ambitious legislative reforms to strengthen rule of law, improve transparency, access to information and fight corruption. Namely the Law of Ukraine On Amendments to some laws of Ukraine on access to public information in the form of open data (2015, № 25, st.192) represents a very strong and supportive piece of legislation for Open Data. With the progressive Access to Information legislation and the relatively new Anti-Corruption legislation the Government has set the course towards combatting corruption and open data is identified as a key element of these policies.
Overall	Very High	YELLOW	The overall legislative framework of the Ukraine represents a supportive environment for Open Data initiatives, however significant parts of laws and reforms are either very new or still in process, thus implementation is not always consistent. Public officials need specific guidelines and training on how to implement the new legislation and regulations correctly. The protection of privacy is regulated by law but not all Government agencies have established robust mechanisms and practices to guarantee and safeguard the protection of privacy in practice. The progressive Access to Public Information Law is very supportive and has specific requirements for OGD. In practice, however, the law is not implemented consequently across Government. Particular the new Open Data Law and its Regulation are strong but have not yet been implemented. One challenge for the Government is to ensure that the ambitious initiatives and reforms will be implemented properly and in a timely manner.

Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A2.01	Ensure policies and practices safeguard the protection of privacy	Open Data Working Group, Cabinet of Ministers	Medium term	Review existing policies and practices and formulate specific actions (as a mandatory standard) to ensure the protection of privacy across Government. Key measure is to establish one responsible contact person for protection of privacy in each agency, with respective training and mandate. SWOT analysis at agency level and publication of best practice guidelines for anonymisation.
A2.02	Strengthen Access to Information practice	Open Data Working Group, Cabinet of Ministers,	Medium term	Ensure that the Right to Access to Information is implemented and followed consistently across Government. Reduce arbitrary practice

		Ombudsman		and use of exceptions to limit or deny access to information. Improve the possibility to obtain right to access by strengthening the Ombudsman institution. These goals might be addressed by formulating specific actions including trainings for civil servants to conform with the new regulations; publication of guidelines for civil servants; publication of statistics on Access to Information requests and on the implementation of the new regulations; finally the Access to Information should be improved by enforcing the pro-active publication of data as determined in the list of mandatory datasets set by the Open Data Regulation.
A2.03	Improve data and system security	Open Data Working Group, Cabinet of Ministers	Long term	Review existing policies and practices on issues of database, network and systems protection and security. Formulate adequate mandatory standards to be implemented across Government to ensure security of data, networks and systems is robust.
A2.04	Draft National Open Data Action Plan (NODAP)	Open Data Working Group, Cabinet of Ministers	Short term	The SC of the ODWG should discuss and draft a first version of the NODAP for the implementation of the Open Data Regulation. The recommended actions of this report might be used as a starting point. The NODAP draft should then be widely disseminated for feedback by stakeholders and be discussed and agreed upon by the ODWG. The NODAP must contain very specific actions for the implementation using S.M.A.R.T. methodology. The implementation of the NODAP should be coordinated by the ODWG and the State Agency for E-Governance, including evaluation of progress, expectation management and public dissemination of results.
A2.05	Standard Open Data license and charging policies	Open Data Working Group, Cabinet of Ministers	Short term	Introduce a standard open license (such as Creative Commons CC-BY) as mandatory for all information and data across Government. Introduce a standard mandatory policy and practice for charging for Government information and data. Both are already defined in the Open Data Regulation and thus must be implemented consistently.
A2.06	Measuring performance and progress	Open Data Working Group, Cabinet of Ministers	Medium term	To ensure that policies are implemented properly and in time, an accountability mechanism with clear indicators for measurement of performance and progress must be established. The Government designated the State Agency for E-Governance to coordinate and monitoring implementation of the Open Data Regulation, however this should be complemented with regular reporting, and assessment of compliance. For all policies related to Open Data, Open

				Government, Access to Information, Accountability, and Anti-corruption and citizen engagement this mechanism should be part of the OGP process, following the established processes of Government self report, civil society evaluation and IRM. The mechanism, process and results must be transparent.
A2.07	Make Open Data integral part of other policies and reforms	Open Data Working Group, Cabinet of Ministers	Medium term	Open Data should not be seen and communicated as a goal in itself, but as a tool and resource to leverage other policy priorities. Thus it is important to elaborate how Open Data can be useful to advance other policies and reforms and national priorities, such as strengthen accountability, reduce corruption, and improve policy decisions based on facts. It is recommended to identify these policy areas where Open Data can play an important role and develop strategies for the implementation to make Open Data useful.

3. Institutional Structures, Responsibilities and Capabilities within the Government

Importance: High

Context: As well as political and senior leadership, middle management level skills and leadership are important to success: creating an Open Data Program requires Agencies to manage their data assets with a transparent, organized process for data gathering, security, quality control and release. To effectively carry out these responsibilities, Agencies need to have (or develop) clear business processes for data management as well as staff with adequate ICT skills and technical understanding of data (e.g., formats, metadata, APIs, databases). Engagement among Agencies and at all levels of Government to set common standards and remove impediments to data interoperability and exchange is also vital, and requires mechanisms for interagency collaboration.

Questions asked in the assessment

3.1. Which agency or agencies have relevant capabilities, mandates, project management experience and technical skills to be a suitable lead institution in the planning and implementation of an Open Data Program? (Importance: Very High)

- + The Cabinet of Ministers of Ukraine has the authority and has delegated the mandate to lead the planning and implementation of an Open Data Program to the Ministry of Regional Development, Construction and Housing of Ukraine and its State Agency for E-Governance in Ukraine. Some relatively new additional implementation partners are the Intersectoral Council for the Development of E-Government (authorized for inter-institutional coordination) and the Committee on Informatization and Communication of the Parliament of Ukraine.
- + The Intersectoral Council for the Development of E-Government is a temporary advisory body under the Cabinet of Ministers of Ukraine. It was created according to the Resolution of the Cabinet

of Ministers of Ukraine on January 14th 2009 (r. № 4).⁴⁹ Its main objective is the preparation and submission of proposals on the national policy on the development of e-government and integration of Ukraine into the global information society to the Cabinet of Ministers of Ukraine.

- + The Committee on Informatization and Communication of the Parliament of Ukraine was created according to the Resolution of the Parliament of Ukraine on December 4th 2014 (№ 22-VIII)⁵⁰. Its competences include: allocation of budgets for OGD program; development of the information society; The national program informatization; e-government; electronic document management; electronic signatures; national system of electronic information resources; telecommunications; postal services; industry programming; cyber security; technical and cryptographic protection of information; the use of radio frequency resource of Ukraine.
- o Other agencies that could take a leading role could include the Ministry of Economic Development and Trade of Ukraine (procurement, administrative services), and the Ministry of Regional Development, Construction and Housing of Ukraine (e-governance in region).
- o Other key stakeholders for Open Data within the Government include: the State Judicial Administration of Ukraine, the Ministry of Justice of Ukraine, the Ministry of Infrastructure of Ukraine, the Administration of the President of Ukraine, OGD advisor to the Prime Minister of Ukraine, the National Bank of Ukraine, and the State Service of Special Communication and Information Protection of Ukraine (SSSC&IP). SSSC&IP is responsible for the security of information and data.
- + Some considerations and actions have been taken on how to socialize and introduce Open Data with agencies and civil servants via an extensive discussion of the Open Data policy during a working meetings of Interagency Working Group on Open Data and via the website of the State Agency for E-Governance.⁵¹
- + To discuss the ways for open government data development in Ukraine, UNDP together with other bilateral partners supported the first international “Open Data Conference in Ukraine” in March 2015 which gathered over 100 representatives of state institutions, civic activists, international experts and other stakeholders.⁵²
- + In addition, two meetings with international partners who provided consultations to develop the “Open Data Legislation”⁵³ and the related “Open Data Regulation”⁵⁴ have been conducted with the support from UNDP⁵⁵. The Open Data policy was also discussed with civil society representatives at a Civic Council under the State Agency of E-Governance during the meeting on July 8th 2015.⁵⁶
- o Initial considerations and actions have been taken to socialize and introduce Open Data across

⁴⁹ Parliament of Ukraine (2009). Resolution № 4 from January 14th, 2009, assessed on August 15th, 2015 from: <http://zakon2.rada.gov.ua/laws/show/4-2009-%D0%BF/paran40#h40>

⁵⁰ Parliament of Ukraine (2014). Resolution of the Parliament of Ukraine on December 4, 2014 № 22-VIII, assessed on September 15th, 2015 from: <http://zakon2.rada.gov.ua/laws/show/22-viii>

⁵¹ Facebook page of State Agency on E-Governance (2015). Open Data. On the way to open and accessible government data, assessed on September 19th, 2015 from:

<https://www.facebook.com/eGovernanceUkraine/posts/902303049822965>

⁵² International Open Data Conference (2014). assessed on August 12th from: <http://iodc.org.ua/>

⁵³ PLEASE ADD

⁵⁴ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

⁵⁵ State Agency on E-Governance (2015). Roundtable meeting with international partners, assessed on September 8th, 2015 from: <http://dknii.gov.ua/content/pershochergovist-vidkrytta-derzhavnyh-danyh-shcho-vazhlyvishe-tehnichni-mozhlyvosti-chy>

⁵⁶ State Agency on E-Governance (2015). Civic Council meeting on discussion of the draft white papers state policy in the field of e-governance on July 8th 2015 , assessed on September 8th, 2015 from:

<http://dknii.gov.ua/content/obgovorennya-proektiv-bilyh-knyg-derzhavnoyi-polityky-u-sferi-elektronnogo-uryaduvannya>

agencies and civil servants during the conference “Information Society Day - 2015” in May 2015 held at the National Academy of Public Administration.⁵⁷

- While some higher level public servants have established basic understanding of OGD more sensitisation is required as most middle level public servants have little understanding of the concepts of Open Data. The National academy of public administration is planning to conduct training on e-governance for civil servants in five regions of Ukraine as part of the E-governance for Accountability and Participation program (EGAP).⁵⁸
- The State Agency for E-Governance currently has 30 employees, which is not sufficient to be able to coordinate ICT issues (such as standardisation, ICT system integration, document exchange, etc) across Government as a whole, its manpower and financial resources would need to be expanded significantly.

3.2. Which any agencies have a CIO, CTO or permanent official positions dedicated to data management? (Importance: Medium High)

- There is no state CIO office under the Cabinet of Ministers of Ukraine. In addition most Government agencies don't have a designated CIO or CTO either. Experts interviewed for this assessment said that this is mostly due to budget constraints.
- Almost all Government agencies have an ICT department or other permanent official positions dedicated to data management and the internal flow of document.
- Some Ministries have strong ICT divisions, in particular: the Ministry of Finance of Ukraine; the Ministry of Social Policy of Ukraine ; the State Fiscal Service of Ukraine; and the Ministry of Justice of Ukraine.

3.3. What interagency mechanisms coordinate ICT issues (such as for technical matters)? (Importance: Medium High)

- + The following inter-agency mechanisms coordinate ICT issues such as for technical matters: the Intersectoral Council for the Development of E-Government; the Working Group on Development Government policy in the area of E-Governance at the Deputy Prime Minister of Ukraine, Minister of Regional Development, Construction and Housing and Communal Services of Ukraine; the Interagency Working Group on Open Data under Intersectoral Council for the Development of E-Government; and several working groups at the State Agency for eGovernance of Ukraine (e-services, ID-identification, and others). Hoever there is little coordination between these different groups.
- + Another interagency-mechanism that coordinates ICT issues is the Committee on informatization and Communication of the Parliament of Ukraine (they have shown to be supportive for an OGD program, and could potentially allocate budgets for an OGD program).
- + The Working Group on Development Government Policy in the area of E-Governance at the Deputy Prime Minister of Ukraine, Minister of Regional Development, Construction and Housing and Communal Services of Ukraine is the most efficient among them (the results of work comprise into Green and White Papers on national E-Governance policies and are followed by the development of corresponding legislation).⁵⁹

⁵⁷ National Academy of Public Administration (2015). Information Society Day - 2015, assessed on September 8th, 2015 from: <http://www.academy.gov.ua/?lang=ukr&tip=osn&page=2&tipn=News&newsid=248&PageNumber=7>

⁵⁸ Eastern Europe Foundation (2015). E-governance for Accountability and Participation (EGAP) program, assessed on September 8th, 2015 from: <http://eef.org.ua/en/governance-and-civil-society/410-the-e-governance-for-accountability-and-participation-egap-program.html>

⁵⁹ State Agency on E-Governance (2015). White books on E-Governance policy, assessed on September 8th, 2015

- Main technical matters are supposed to be coordinated by the newly created Intersectoral Council for the Development of E-Government, which has established five working groups in the following areas: electronic interaction; provision of electronic services and the development of e-commerce; development of electronic identification schemes; use of open data; working group on legal support projects in the field of e-government.⁶⁰ However the Council and its working groups have just started their work in 2014 and are not yet fully operational.
- The State Service of Special Communication and Information Protection of Ukraine (SSSC&IP) is coordinating the issue of security and exchange of registers across government. According to SSSC&IP there are plans to create a working group on ICT protection (an initiative of the Ministry of Justice of Ukraine). Under the Council of National Security and Defense there is also an inter-agency mechanism on national information security of Ukraine.

3.4. What process is currently used to measure agency performance or quality of service delivery? (Importance: Medium)

- Performance management is done on individual agency or line Ministry level but not on a government-wide basis.
- Although all Ministries and Agencies are required to report annually and on project based there is no common methodology, policy or processes to measure agency performance or quality of service delivery across Government. As a result in practice the processes vary quite significantly from agency to agency.
- Some examples of reporting and performance measurement include: the State Enterprise “Information and resource centre” is using monitoring and feedback from applicants to measure its performance or quality of service delivery; the State Service of Special Communication and Information Protection of Ukraine is reporting to its line Ministry via its controlling mechanism; the State Migration Service of Ukraine uses the fact sheet of administrative services.
- + To introduce a common process for the measurement of agency performance and service delivery quality, the Cabinet of Ministers of Ukraine is developing the Center for Readiness Assessment.

3.5. Which agency or ministry is primarily responsible for data or statistics? (Importance: Medium)

- + The State Statistics Service of Ukraine⁶¹ is primarily responsible for statistics, is a specially authorized central executive body in the area of statistics and is directed by the Cabinet of Ministers of Ukraine through the Minister of Economic Development and Trade and implements the state policy in the field of statistics. Representatives of the State Statistics Service interviewed for this assessment showed to be supportive for Open Data. In fact many of their publications can be considered Open Data. However, as mentioned above, the agency has established a practice of charging for certain kinds of data, which represents a barrier to Open Data.
- + All Ministries (and their agencies or State Owned Enterprise they are working with) are responsible for the collection and storing of statistical data of its sector/domain, e.g. the Ministry of

from:

<http://dknii.gov.ua/content/obgovorennya-proektiv-bilyh-knyg-derzhavnoyi-polityky-u-sferi-elektronnogo-uryaduvannya>

⁶⁰ State Agency on E-Governance (2015). Working Group at Intersectoral Council for the development of E-Government, assessed on September 8th, 2015 from: <http://dknii.gov.ua/content/rezulatty-zasidannya-mizhgaluzevoyi-rady-z-pytan-rozvytku-elektronnogo-uryaduvannya>

⁶¹ Cabinet of Ministers of Ukraine (2014). On approval of the State Statistics Service of Ukraine, assessed on September 9th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/481-2014-%25D0%25BF&sa=D&ust=1441751261362000&usg=AFCjCNGih0XF4vZ8NqyUZ0XEAKkMYxsq0Q>

Infrastructure of Ukraine collects and stores data on railways, seaports, aviation etc; the Ministry of Education of Ukraine collects and stores statistical data on schools, levels of education, etc. All Ministries and agencies have to share their respective statistical data with the State Statistics Service of Ukraine.

- The processes for collecting, cleaning and managing data are established at line Ministry or Agency level with little coordination across Government.
- The State Statistics Service of Ukraine offers statistical information in form of reports. Structured statistical data is mostly available as HTML Tables on the website. Some data is available for download in the formats CSV and XLS, that can be processed by machines.

3.6. Which agencies or Ministries appear most concerned about the release of data, and what is the basis of their concern? How can they be handled procedurally, and how can their concerns be addressed? (Importance: High)

- + Some Ministries have expressed their interest in Open Data. The Ministry of Infrastructure of Ukraine is even applying for assistance to open up its data, since they possess a lot of data and do not have enough resources.
- Most Ministries are concerned about data security, in the sense that they might not be able to protect sensitive data in their networks or databases from illegitimate access (cybercrime). The other main concern expressed by various Ministries is funding and limited capacities and resources. Some Ministries are concerned about the release of data for the following reasons: the topic is rather new; they do not understand it fully; missing or poor quality of data; and to publish data that contains sensitive and/or classified information.
- Some Ministries are concerned about (among them the Ministry of Interior of Ukraine, the State Security Service of Ukraine, the State Service of Special Communication and Information Protection of Ukraine) potential conflicts that could arise from publishing data that contains personal data or classified information.
- The Ministry of Justice of Ukraine, and the State Fiscal Service of Ukraine are most concerned about their capacities and resources to publish huge amounts of data and related technical issues.
- The concern of the authorities about the release of data is related to data security and access to personal information
- Interviewees for this assessment observed that some Ministries might perceive Open Data as a useful PR exercise, but with no greater commitment.

3.7. How strong is the government's overall ICT skill base among senior government leaders and civil servants? (Importance: High)

- + Some Government agencies receive training on ICT, data standards or data analytics. A main vendor is the Computing Technology Industry Association (CompTIA), a non-profit trade association, created in 1982, which offers a variety of industry ICT certifications.⁶²
- + Government officials receive training on ICT, including data standards and data analytics via the National Academy of Public Administration attached to the office of the President of Ukraine (NAPA) as part of the training program of Masters of Public Administration. The academy also offers a mandatory continuous learning program. Public servants are required to renew their knowledge by attending a course of approximately two weeks every five years.
- It is rather difficult to evaluate the level of the Government's overall ICT skills among senior government leaders and civil servants since there is no measurement or related requirements.

⁶² CompTIA (2015). The Computing Technology Industry Association, a non-profit trade association, was created in 1982, and offers a variety of industry certifications on ICT, see <https://certification.comptia.org/>

However, the overall digital literacy among senior government leaders and civil servants appears to be reasonably adequate. It is generally higher among younger generation civil servants.

- According to experts interviewed there is a lack of training and not sufficient trained staff with expert knowledge in data management, anonymisation and data analytics.
- Some Ministries receive training on ICT, data standards or data analytics from external private sector companies such as Certification CompTIA. The Ministry of Economic Development and Trade of Ukraine is collaborating with “Skills Academy” that offers training www.skillsacademy.com.ua.⁶³
- ICT skills do not play any significant role in deciding civil service grades and promotions.

3.8. What is the government’s presence on the Web? (Importance: Medium)

- + All central executive bodies, regional state administrations, Kyiv and Sevastopol city state administrations have their official websites. However not all local governance bodies have their own websites.
- + Some Ministries enrich their web-presence with interactive maps, social media channels or feedback mechanisms. Others adjust their web-sites for mobile devices e.g. the Ministry of Infrastructure of Ukraine. The single-window website of the Ukraine Government offers rich information on Government agencies, their activities, including, news, infographics, videos, photos and Social Media channels, see: www.kmu.gov.ua
- Only very few Government agencies offer E-Services, Mobile-enabled services, or APIs but some have programs to develop E-Services, including the Ministry of Economic Development and Trade of Ukraine, the Ministry of Justice of Ukraine, State Architectural Inspection of Ukraine (4 e-services in construction), the Ministry of Ecology and Natural Resources of Ukraine.
- Unified State Registry of Organizations and Entities of Ukraine (EDRPOU), run by the Ministry of Justice of Ukraine, has an API although it is not open but charges apply.
- + The Ministry of Regional Development as well as the Cabinet of Ministers of Ukraine are using their own software to measure their website’s traffic. Most other agencies measure the traffic of their websites using Google Analytics.
- + Most of the central executive authorities update their web-sites according to the Cabinet of Ministers’ Regulation No 3 from 2002 “On the Procedure for the publication on the Internet of information on the activities of executive bodies”⁶⁴.
- In accordance with the results of the United Nations E-Government Survey 2014, Ukraine ranked 87th among 193 UN members in 2014. In 2012, Ukraine was 68th and in 2010 54th.
- There E-Services are little developed in Ukraine, and the process of introducing more E-Services was practically stalled during the 2014 crisis. The State Agency for E-Governance of Ukraine is preparing a Draft of Resolution on E-Services⁶⁵.
- + The Ministry of Economic Development and Trade of Ukraine is responsible for launching and administering the Unified State Portal of Administrative Services which was launched in the testing mode at <http://poslugi.gov.ua> in 2015. In parallel to that, there exists a highly popular volunteer initiative of the civil society <https://igov.org.ua> through which a number of central and regional/local authorities introduced their service provision without waiting for resolving the key problems hindering the e-services’ introduction in Ukraine (absence of e-identification of a person, lack of interoperability of the state authorities etc).

⁶³ Skills Academy (2015). Assessed September 9th 2015: <http://skillsacademy.com.ua>

⁶⁴ The Decisions of The Cabinet of Ministers of Ukraine No 3 from 2002 “On the Procedure for the publication on the Internet of information on the activities of executive bodies”, assessed on September 9th, 2015 from: <http://zakon1.rada.gov.ua/laws/show/3-2002-%D0%BF>

⁶⁵ Cabinet of Ministers (2015). Draft of Decision of Cabinet of Ministers of Ukraine, assessed on September 9th, 2015 from: http://dknii.gov.ua/sites/default/files/koncepciya_rozvytku_e-poslug.pdf

Assessment on the 3rd dimension: Institutional Structures, Responsibilities and Capabilities within the Government

Question area	Importance	Assessment Rating	Commentary
Suitable lead institution	Very High	GREEN	The State Agency for E-Governance is well positioned and ready to manage an Open Data Program. The political weight, however, must come from the Cabinet of Ministers, so the Agency has sufficient mandate to coordinate an Open Data Program across Government and ensure that Open Data policies are implemented. However the Agency has limited resources and little practice in implementing programs across Government. The establishment of the Open Data Working Group at the Cabinet of Ministers could play a significant role to get necessary buy in from other Government authorities and to help with the coordination and implementation.
Data management capabilities	Medium High	YELLOW	Although no CIO/CTO type positions exist, most key agencies have IT departments with some technical capacities. Further capacity building necessary.
Interagency ICT coordination	Medium High	YELLOW	There is no track record of managing whole-of-government ICT initiatives and inter-agency coordination is weak. Most line Ministries have established their own siloed ICT solutions, representing challenges for interoperability and standardisation. More inter-agency ICT coordination needed.
Agency performance measurement	Medium	RED	There are no coherent policies or practices for the measurement of agency performance or quality of service delivery.
Agency responsible for statistics	Medium	GREEN	The State Statistics Service of Ukraine has well established policies and practices on managing and publishing statistical data.
Concerns towards data release	High	YELLOW	There are some Ministries embracing Open Data (including: the Ministry of Justice of Ukraine, The Ministry of Economic Development and Trade of Ukraine; the Ministry of Infrastructure of Ukraine; the Ministry of Regional Development, Construction and Housing of Ukraine; Ministry of Finance of Ukraine; Ukraine State Service of Geodesy, Cartography and Cadastre) while some others express concerns about releasing Open Data. Main concerns expressed include: limited human capacities and missing financial resources; concerns on data security and potential conflicts that could arise from publishing data that contains personal data or classified information.
ICT skill base	High	YELLOW	The overall ICT skill base appears to be reasonably adequate, although public servants with advanced technical skills in data management, advanced statistics and data analytics are scarce.
Government web presence	Medium	YELLOW	Government and its agencies have an active web presence, however E-Service, Mobile-Enabled-Services are rather an exception.
Overall	Medium High	YELLOW	No single agency appears to be suited to lead the Open Data

			program across Government alone. However supported with the political weight of the Cabinet of Ministers and in cooperation with the Open Data Working Group, the State Agency for E-Governance has mandate and technical competency to be an ideal candidate to lead an Open Data Program. Data management capabilities and interagency ICT coordination needs to be leveraged to overcome isolated and incompatible IT legacy systems and improve interoperability and standardisation. Although some Ministries have concerns releasing Open Data, there is indication that most authorities are willing to move and release data in accordance with the Open Data legislation. Capacity development programs are necessary to train more public servants with advanced technical skills in data management, advanced statistics and data analytics.
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Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A3.01	Strengthen the State Agency for E-Governance as the coordinator for implementation	Cabinet of Ministers	Immediate	As recommended in A1.01 the process of the Open Data Regulation should be coordinated by the ODWG at the Cabinet of Ministers, this is where key Government officials and stakeholders discuss and recommend actions for the NODAP. The actual implementation of the NODAP, alongside with necessary measures like capacity development and technical support should be coordinated by the State Agency for E-Governance. To enable the agency to effectively do this job, it needs additional financial and human resources. Furthermore the role of the agency in this process should be defined more clearly to avoid confusion.
A3.02	Improve Data management capabilities	State Agency for E-Governance	Medium term & continuous	Establish a capacity development plan/curricula to improve data management capabilities across Government based on a gap assessment. Implementation of the capacity building program should be coordinated by the State Agency for E-Governance in cooperation with the National Academy of Public Administration. To scale across Government, this program should follow a “train-the-trainers” approach. Special programs on advanced statistics and data analytics are to be developed.
A3.03	Nomination of Open Data contact persons / CTO	Cabinet of Ministers	Immediate	Each Ministry and Government Agency must nominate a contact person for the coordination of the NODAP implementation (nomination of these officials by the government-data owners is also required according to the CMU Regulation #835). This contact points can liaise with the ODWG, become the multiplier and champion for Open Data in their organisation

				and also help coordinate other ICT issues such as standardisation across Government. A special training program for them is recommended.
A3.04	Measurement for digital service delivery	Cabinet of Ministers	Long term	A coherent policy and practices for the measurement of agency performance or quality of service delivery across Government should be developed and established to evaluate performance and provide insights on how to improve.
A3.05	Improving E-Services	State Agency for E-Governance	Medium term	Open Data can be used to improve and build new E-Services at Ministry and Agency level. The creation of E-Services should be coordinated across Government to avoid siloed solutions and enhance interoperability.

4. Government Data Management Policies and Procedures

Importance: Very High

Context: Open Data Programs can build on established digital data sources and information management procedures within Government where they already exist. Where data is only available in paper form it will be hard to release as Open Data and in reusable format quickly and cheaply. Conversely, good existing information management practices within Government can make it much easier to find data and associated metadata and documentation, identify business ownership, assess what needs to be done to release it as Open Data and put processes in place that make the release of data a sustainable, business-as-usual, downstream process as part of day-to-day information management.

Questions asked in the assessment

4.1. What are the policies and practices on the management of government information? (Importance: High)

- + The rates of web-connected working places within the apparatus and structural divisions of region state administrations are 92%. District state administrations have their rates at the level of 65%. According to the related survey, the electronic document and records management system at the administration's apparatus has been established in all regions and Kyiv city but Zaporizhzhya, Kyiv, Kirovograd and Ternopil oblasts⁶⁶.
- + Governance processes for information and data security are regulated by the Law of Ukraine On Protection in Information and Telecommunication systems⁶⁷. According to this Law authorities must implement the "Integrated system of information protection" in all Governments ICT systems.

⁶⁶ Working Group on Development Government policy in the area of E-Governance at the Deputy Prime Minister of Ukraine (2015). The Green Paper on the electronic governance policy in Ukraine (2014), assessed on September 5th, 2015 from: <http://etransformation.org.ua/2014/11/24/355/>

⁶⁷ Parliament of Ukraine (2014). Law of Ukraine On Protection in Information and Telecommunication systems, assessed on September 5th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/80/94-%D0%B2%D1%80>

- + All authorities in their activities must adhere to the Decision of the Cabinet of Minister of Ukraine №373 from 2006 "On approval of rules of information protection in information, telecommunication and information telecommunication systems"⁶⁸, the Decision applies to: public information, which refers to government information; resources as well as public information about the activities of government agencies, military units, which is published in the Internet, other global information networks and systems, or passed telecommunications networks; confidential information; service information; information which is provided by state secrecy or other secrets law; information, protection of which is set by law.
- + The standards for data quality, including provenance, accuracy, timeliness and completeness of update on official webpages of authorities are regulated by the Decision of the Cabinet of Ministers of Ukraine No 3 from 2002 "On the Procedure for the publication on the Internet of information on the activities of executive bodies".⁶⁹ However these standards were created almost a decade ago and need to be updated, to meet modern data management standards.
- + Governmental agencies interviewed for this assessment mentioned transparency, accountability, reducing corruption, increasing confidence, development of mobile applications, development of standards and projects as benefits that would follow from the release of the data as Open Data.
- + CERT-UA (Computer Emergency Response Team of Ukraine) is a center under The State Service of Special Communication and Information Protection of Ukraine that is conducting trainings and seminars, first of all for public authorities, but also for business. CERT-UA - specialized structural subdivision of the State Center and countering cyber threats⁷⁰. The main objective of CERT-UA - ensure protection of state information resources and information and telecommunications systems from unauthorized access, misuse and breaches of confidentiality, integrity and availability.
- + In addition: The Institute of special communication and information protection at National Technical University "KPI" prepares staff for State Service of Special Communication and Information Protection of Ukraine. The Institute provides training on information security. There is also cooperation with NATO Trust Fund.
- o An internal workflow system has been introduced in 2013 but, according to Government representatives interviewed for this assessment, it is already obsolete and needs to be upgraded and connected to the "Unified System of Interaction of Executive Authorities"⁷¹, developed by the State Owned Enterprises State Center for Information Resources of Ukraine.
- o There is an official policy that mandates that Government publications and data have to be in multiple languages. However in some cases information is also made available in Russian and other languages of national minorities. Most central Government websites also provide information in English.

4.2. To what extent does the government have a coherent view of its data holdings? (Importance: Medium)

- The government does not have a coherent view of its data holdings at the whole-of-government level, hence issues of data duplication arises.

⁶⁸ Decision of Cabinet of Minister of Ukraine №373 from 2006 "On approval of rules of information protection in information, telecommunication and information telecommunication systems", assessed on September 5th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/373-2006-%D0%BF>

⁶⁹ Decisions of Cabinet of Minister of Ukraine No 3 from 2002 "On the Procedure for the publication on the Internet of information on the activities of executive bodies", assessed on September 5th, 2015 from: <http://zakon1.rada.gov.ua/laws/show/3-2002-%D0%BF>

⁷⁰ CERT-UA (2014). Assessed on September 9th, 2015 from: <http://cert.gov.ua>

⁷¹ State Center for Information Resources of Ukraine (2015). Unified State System of Electronic Document Exchange, assessed September 10th, 2015 from: <http://goo.gl/KjYPO>

- Most Ministries and Agencies have some overview on their data holdings but most of them have not established coherent inventories of their data. Where inventories exist, there is no evidence on how complete, up to date and detailed they are. However some agencies interviewed for this assessment indicated that they have started preparing such inventories of data.
- + The Open Data Working Group, under the Cabinet of Ministries, has started mapping of existing data holdings at with all key Government agencies as a starting point of a comprehensive inventory of all data holdings at the whole-of-government. An initial list of about 300 datasets was identified as data that has to be published as Open Data into the central data portal data.gov.ua⁷², as part of the implementation of the “Open Data Regulation”.⁷³ This list was created in 2015 by the ODWG in cooperation with all participating Ministries and agencies. The list represents identified priority datasets, their publication as Open Data is now mandatory via the Open Data Regulation. The list will be updated on a regular basis by the ODWG including feedback generated from public consultations via data.gov.ua/suggest.
- + The Minister of the Cabinet of Ministers (Cabinet of Minister Ganna Onishchenko) is coordinating all authorities on the implementation of intersectoral docflow (e.g. the Unified State System of Electronic Document Exchange) in collaboration with the SOE State Center for Information Resources of Ukraine and the State Agency for E-Governance.
- + The Ministry of Justice of Ukraine is working with the Ministry of Finance of Ukraine to open up its registers. This is also coordinated by the State Agency for E-Governance.
- o On metadata standards Ukraine will adopt EU standards as part of the EU Association Agreement.
- There are no established metadata standards, and where metadata is used it is not clear to what extent data holdings are described by complete, accurate and detailed metadata records in practice.
- The concept of “core common reference datasets” which could be used across Government (e.g. organization codes, address register) is relatively new to Ukraine and thus not widely adopted.

4.3. How and where is government data held? (Importance: High)

- + Governmental data are held both in paper and electronic archives. While some historic data remains paper based, most data is nowadays collected and archived in digital formats. Cadastral records are gradually converted into digital formats.
- o Procedures for data archiving and digital preservation are developed by the State Archives of Ukraine. It has established standards, policies, responsibilities and procedures for data archiving and digital preservation. However as there is little coordination on digitisation and digital preservation, it is not likely that Government agencies adhere to common policies, practices and standards. There is no evidence to what degree they conform to international standards and best practice.
- o Government data are held in multiple formats, including proprietary and open formats. Predominant are, however, formats that can not be processed by machines such as HTML, PDF or MS Word. As most Ministries operate their own ICT and data management solutions interoperability and compatibility of data is an issue. However, according to the Resolution #835 on Open Data⁷⁴ it will become mandatory for Government agencies to publish data in defined formats.

⁷² The data portal data.gov.ua was developed in 2014 by the non-for profit CSO SocialBoost, with the support of the State Agency for E-Governance, the International Renaissance Fund (OSI Ukraine) and Microsoft Ukraine. The portal is still a prototype but is to become the official data portal of the Government as

⁷³ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

⁷⁴ Parliament of Ukraine (2015). Draft of Resolution on OpenData, assessed on September 18th, 2015 from: http://dknii.gov.ua/sites/default/files/proekt_vidkryti_dani.docx

- Most Governmental agencies hold their data on their own data centers or servers. Data published on Government websites, or stored on Government servers must follow the Decision of Cabinet of Minister №373 from 2006 "On approval of rules of information protection in information, telecommunication and information telecommunication systems".⁷⁵
- No government ICT interoperability frameworks exists. There are no programs to support the development of integrated data assets and information exchange. As a result, both public authorities and agencies in Ukraine manage their information and data in a variety of complex systems (including state registers, departmental e-document management systems, standard activity automation systems and management decision-making support systems), but the main problem is that they are not compatible with each other and use different technologies, standards and formats. All these lead to lack of coordination, variability and non-compliance use of state information resources, low efficiency and effectiveness, lack of flexibility of public governance. Actual information exchange lacks coordination, standardisation and interoperability. A possible solution might be reached through the development and adoption of single requirements (standards, formats, protocols) for interoperability and electronic interaction⁷⁶.
- Government representatives interviewed for this assessment stated the importance to ensure interoperability in the context of further European integration of Ukraine. Thus Ukraine needs to ensure the requirements of both the eIDAS (the European Parliament and the Council of the European Union requirements on electronic identification and trust services for electronic transactions at the internal market) and the EIF (European Interoperability Framework) are met. The most appropriate way for Ukraine of ensuring automated electronic data interchange of public authorities' information systems is to develop an integrated system of electronic interaction.⁷⁷
- Sometimes Ministries and other Government bodies outsource data management and other ICT issues to State Owned Enterprises. For example, the State Migration Service of Ukraine has a Department of Informatization and Telecommunication Systems and Information Protection but additionally outsourced services the State Owned Enterprise "Ukrainian Special Systems".
- Some solutions from SOE "State Center for Information Resources of Ukraine" for better interaction between authorities are ready and process of their implementation continues: Electronic Interaction System of Executive Bodies⁷⁸, and the Unified State System of Electronic Document Exchange⁷⁹ and others.
- Among the technical factors that obstruct the release of the data as Open Data, is the lack of interoperability caused by isolated ICT solutions of each Ministry and the missing coordination and standardisation on ICT issues and standards. Other factors include insufficient funding, legacy hardware and software systems, lack of sufficiently qualified specialists, technical difficulties, issues with the procurement of new equipment, availability of hosting, server and computing space.
- In some cases the Government has outsourced ICT services to State Owned Enterprises, private

⁷⁵ Decision of Cabinet of Minister of Ukraine №373 from 2006 "On approval of rules of information protection in information, telecommunication and information telecommunication systems", assessed on September 5th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/373-2006-%D0%BF>

⁷⁶ Working Group on Development Government policy in the area of E-Governance at the Deputy Prime Minister of Ukraine (2014). Green Paper on the electronic governance policy in Ukraine, assessed on September 5th, 2015 from: <http://etransformation.org.ua/2014/11/24/355/>

⁷⁷ Working Group on Development Government policy in the area of E-Governance at the Deputy Prime Minister of Ukraine (2014). The Green Paper on the electronic governance policy in Ukraine, assessed on September 5th, 2015 from: <http://etransformation.org.ua/2014/11/24/355/>

⁷⁸ State Center for Information Resources of Ukraine (2015). Electronic Interaction System of Executive Bodies, assessed September 10th, 2015 from: <http://goo.gl/g98U3R>

⁷⁹ State Center for Information Resources of Ukraine (2015). Unified State System of Electronic Document Exchange, assessed September 10th, 2015 from: <http://goo.gl/Kj1YPO>

companies, or PPPs so that some databases are now operated by these external players. Recently, the Ministry of Justice presented the work of the new SOE "National Information Systems"⁸⁰. This SOE is supposed to take over the technical management of the operation of 21 State Registers of the Ministry of Justice of Ukraine⁸¹.

4.4. What is the extent of intra- and inter-governmental actual demand and latent demand for data? (Importance: High)

- The extent of intra- and inter-governmental actual demand for data is not very high, this might be caused to poor quality of available data and to relatively high transaction costs obtaining the data. However agencies interviewed for this assessment expressed high latent demand if data were available in high-quality and at low transaction costs. High demand is expressed particularly for key datasets such as maps, cadastral data, company data.
- There are no established processes for interagency data sharing and thus sharing happens ad-hoc on request, which results in and makes it inefficient. When Government authorities need data from other authorities at present data might be provided upon official request which is not efficient. This might be solved with the implementation of the Electronic Interaction System of Executive Bodies⁸² and/or improved availability of Government data through proactive publication to a central portal.
- + There are some classifications for exchanging data used in Government, including: Classification of economic activities; classification of types of business entities; statistical classification of organizational forms of economic actors; classifier of objects, administrative and territorial structure of Ukraine; classification of government; classification of countries; trade Classification.⁸³
- o In some cases private sector companies offer data of higher quality. As a result Government agencies sometimes acquire data from private sector. An example of data bought from private sector providers is Credit Bureau⁸⁴. The Ukrainian Bureau of Credit Histories was established as a joint project by the Commercial Bank (PrivatBank) and the foreign company "BikOptima Limited" in 2005. It collects and aggregates historic information about the credits from banks, insurance companies, leasing companies, credit unions and other financial institutions and provides this information and related analysis as a commercial service.

4.5. What data is already made available outside government - either free or for a fee - and on what conditions? (Importance: High)

- + There are several datasets that have been made available outside government, including :the access to the Unified State Registry of Organizations and Entities of Ukraine and Unified State Register of legal acts.
- + Information on Government services is provided on gov.org.ua, and information on public procurement at prozoro.org. Both projects are developed and run by CSOs with the support of the Government.
- + The Ministry of Infrastructure of Ukraine provides the following data free of charge: procurement

⁸⁰ National Information Systems (2015). Assessed on September 19th from: <http://nais.gov.ua/>

⁸¹ Webpage of Judicial and juridical newspaper online (2015). In public registers will be the new owner?, assessed on September 19th, 2015 from: <http://bit.ly/1KoqxOH>

⁸² State Center for Information Resources of Ukraine (2015). Electronic Interaction System of Executive Bodies, assessed September 10th, 2015 from: <http://goo.gl/g98U3R>

⁸³ National Statistic Agency (2015). List of national Statistical classifications, assessed on September 10th, 2015 from: <http://www.ukrstat.gov.ua/work/klass200n.htm>

⁸⁴ Ukrainian Bureau of Credit Histories (2015). Official Webpage, assessed on September 10th, 2015 from: <http://ubki.ua/ua>

- plans, financial plans, registers of shipping, road data, etc.⁸⁵
- Information and data, where available are predominantly published as static files, and in most cases as unstructured data in formats that can not be processed by machines. APIs are not available with a very few exceptions.
- Data provided on Government websites are not always downloadable or scrapable. Thus a number of CSOs (Centre UA/CHESNO, Opora, Texty, Kantselyarska Sotnya, COST.UA, Slovo i Dilo) have specialized in scraping and parsing Government websites or documents to transform the unstructured information into structured data that can be processed by machines.

4.6. What practical experience does the government have in anonymizing personal data? (Importance: High)

- While regulation for anonymizing personal data exists, only few Government agencies, including the Statistical Service, Central Bank, Ministry of Finance and Ministry of Justice, have shown evidence to have established robust processes to safeguard the protection of personal data.
- + Among the few positive examples are the National Statistics Agency and the State Judicial Administration of Ukraine who have established policies and practices for anonymising personal information in their data.
- Another example is the Single State Register of Court Decisions⁸⁶ where personal data in cases are anonymized, however, there is no evidence that these systems actually safeguard the protection of personal data.

4.7. Which agencies with established capabilities in data management (e.g. the NSO) could give leadership to a wider program? (Importance: Medium)

- + Some Government agencies that have established capabilities in data management and could provide leadership to a wider program, include: The State Agency for E-Governance of Ukraine; the Ukraine State Service of Geodesy, Cartography and Cadastre; and perhaps also the Ministry of Interior of Ukraine.
- + According to the Law of Ukraine "On Payment Systems and Money Transfer in Ukraine" the National Bank of Ukraine keeps the Register of payment systems, settlement systems, participants in these systems and operator services payment infrastructure. The National Bank of Ukraine is responsible for electronic payment systems⁸⁷.
- o Ukraine is on an initial stage of implementation of Open Data. The Cabinet of Ministers has the mandate and political power to coordinate the implementation of the "Open Data Regulation" which will make the publication of Open Data mandatory for all Government bodies. The State Agency for E-Governance has established capabilities in data management and could lead and coordinate a wider program. It could coordinate the technical aspects of the implementation, the supply of data into the national data portal and additional activities such as promotion, capacity development, seminars, conferences, presentation of the Open Data.

⁸⁵ Ministry of Infrastructure of Ukraine (2014). Official website, assessed on November 1st from: <http://new.mtu.gov.ua/timeline/Vidkriti-dani.html>

⁸⁶ Ministry of Justice (2015). Single State Register of Court Decisions, assessed on September 8th, 2015 from: <http://reyestr.court.gov.ua/>

⁸⁷ Parliament of Ukraine (2014). Law of Ukraine "On Payment Systems and Money Transfer in Ukraine", assessed on September 8th, 2015 from: http://zakon4.rada.gov.ua/laws/show/2346-14&sa=D&ust=1441751801261000&usg=AFQjCNG6nZvfBaVYC8s_DAnBFgkgYVKnYg

Assessment of the 4th dimension: Government Data Management Policies and Procedures

Question area	Importance	Assessment Rating	Commentary
Information management	High	RED	There are no coherent information management policies and standards, consistently enforced across Government. Where policies or standards for information and data security, data quality, including provenance, accuracy, timeliness and completeness exist, they are not consequently implemented across Government.
Data holdings	Medium	YELLOW	No coherent view on data holdings at Government as-a-whole. No inventories of data assets exist at agency level, but certain officials have a fair understanding of their agency's data assets.
Data form and location	High	YELLOW	Some Government data remains paper based. Digitization programs are not coordinated. Notable number of key agencies have Management Information Systems (MIS) that hold machine-readable data, some of which are high-value data, though these systems are siloed ICT solutions. Interoperability and standardisation need to be improved.
Government data demand	High	YELLOW	Data is regularly requested by civil society and the media. Data sharing inside and outside Government is generally difficult and on ad-hoc base, no proactive publication, and inefficient. Actual inter- and intra-governmental demand for data remains low as data sharing happens on official request, with relatively high transaction costs.
Public data availability	High	YELLOW	Public availability of high-quality data remains low. Few agencies publish data in formats that can be processed by machines. Published data is often of low quality and very aggregated.
Experience in anonymization of data	High	RED	With the exception of few agencies (including State Statistical Service and Ministry of Finance) there is no evidence that anonymization practices actually safeguard the protection of personal data. Coherent policies and practice needs to be implemented across Government agencies, where personal data is part of Government records. This will also require capacity building on anonymization methods and techniques.
Agencies that can take leadership roles	High	YELLOW	Some Government agencies that have established capabilities in data management and could provide leadership to a wider program, namely the State Agency for E-Governance of Ukraine.
Overall	High	YELLOW	There are no coherent information management policies or standards for information and data security, data quality, including provenance, accuracy, timeliness and completeness consistently implemented across Government. No coherent view on data holdings at Government as-a-whole. Some Government data remains paper based and data in formats that can be processed by machines is often not published even if it exists inside Government. Data quality is also often an issue. Data sharing happens on a case by case basis and obtaining data is generally difficult and inefficient. There are no anonymization practices implemented across Government agencies to safeguard the protection of personal data.

Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A4.01	Information management policies and standards	State Agency for E-Governance	Long term	Formulate, implement and enforce coherent information management policies and standards for information and data security, data quality, including provenance, accuracy, timeliness and completeness.
A4.02	Establish a national Information Asset Register (IAR)	State Agency for E-Governance	Medium term	The Open Data Regulation should mandate for inventories of data assets at agency level that can be aggregated into a national Information Asset Register coherent view on data holdings at Government as-a-whole. This IAR should be made available via the national data portal. The IAR can play a vital part on the process of prioritising data publication and inform future data collection and publication. It is also a key element that helps citizens to make informed Access to Information requests. The IAR might be developed on basis of the initial list of priority datasets of the Open Data Regulation.
A4.03	Integration and standardisation of Management Information Systems (MIS)	State Agency for E-Governance	Medium to long term	The new Electronic Interaction System of Executive Bodies and the Unified State System of Electronic Document Exchange should be introduced across Government to overcome siloed ICT solutions and improve integration, standardisation, and data management and sharing across Government. Legacy systems might be updated or have to be replaced, civil servants trained to the new system, which makes this a long term activity that will require resources and time. It is important to ensure these new Systems are “Open Data ready”, e.g. are able to deal with structured data in formats that can be automatically processed by machines and have functionalities for exporting and publishing data as well as APIs.
A4.04	Improve public availability of high-quality data and leverage demand	State Agency for E-Governance	Short to medium term	The public availability of high-quality data via the central data portal will be improved through the Open Data Regulation. This will not only stimulate demand and reuse from civil society and private sector but should also be actively promoted to leverage demand and reuse of data within Government. This is an

				iterative process. Specific pilot projects for more efficient data use and analysis within Government might be developed. Sector where pilot projects can be easily developed include: Budget and spending data, parliamentary data, election data, main central registers, statistics, postcodes, national maps.
A4.05	Improve anonymisation practices	State Agency for E-Governance	Medium term	The implementation of the mandatory standard to ensure the protection of privacy across Government (A2.01) should be coordinated alongside with guidelines and capacity building.

5. Demand for Open Data

Importance: Very High

Context: The value of data is in its use. A strong demand-side “pull” of data is important not only in creating and maintaining pressure on Government to release data, but also in ensuring that the wider Open Data ecosystem develops and that Open Data is turned into economically or socially valuable services for citizens. The “pull” can come from civil society, the private sector, international organizations, donors and individual citizens.

Questions asked in the assessment

5.1. What is the level and nature of actual demand and latent demand for data from Civil Society, Development Partners and the media? (Importance: High)

- + There are a number of specialised CSOs with sufficient skills to be considered Open Data champions including SocialBoost, CenterUA, Opora, Kancelyarska Sotnya, Vox Ukraine, Chesno, Texty.org.ua, Nashi Groshi (our money) and some media organizations such as Ukrainska Pravda, Gromadske TV. These organisations are using government data in a systematic way for their analysis, reporting, policy and advocacy work. They also have capacities to develop or manage software applications or innovative websites.
- + Directly after the fall of the previous government regime a project called Yanukovych Leaks⁸⁸, started to scan, structure and analyse thousands of document that were found when Yanukovych fled the country. Investigative journalism worked together with computer engineers to investigate for misuse of power and corruption. The project is now operated by the Organized Crime and Corruption Reporting Project (OCCRP) which is a not-for-profit, joint program of a number of regional non-profit investigative centers and for profit independent media stretching from Eastern Europe to Central Asia.
- + In 2014 volunteers started the project ‘Kantseliarska Sotnya’ (in english: “Project critical hundreds”) to analysis documents from the Yanukovych regime to investigate issues of corruption. About 3000 volunteers of Kantseliarska Sotnya have approximately transferred 5,700 (mostly scanned or

⁸⁸ Organized Crime and Corruption Reporting Project (2014). Yanukovych Leaks, assessed on August 12th, 2015 from: <http://yanukovychLeaks.org/>

handwritten) asset declarations from public servants into structured open data format that is now analysed and used to investigate corruption.⁸⁹ The group also works on a project on beneficial ownership of high-profile real estate. The data is acquired from different sources, including crowdsourcing and scraping official websites. The group has high actual demand for data but very high transaction costs to get it.

- + In 2014 a collaboration between CSOs, commercial platforms, public authorities, and businesses launched a public procurement platform, called PROZORRO, with the goal to improve transparency, effective public spending and corruption prevention through public monitoring of public procurements.⁹⁰
- + The project “Open Budget in UA” from the CSO “Center for Political Studies and Analysis” is offering a platform to publish, analyse and visualise Government budget and spending data. In the short time since its launch early 2015 the project has approached city and district governments and managed to get more than 20 cities and some districts to publish their budget data into the platform. The project is the nucleus of a “social audit” movement with expressed high demand for spending and budget data.⁹¹
- + CHESNO is a parliamentary monitoring project, that reuses data from the Parliament of the Ukraine. They actively demand for data on Political Parties and MPs, on party finances and asset declarations, on attendance and votings, parliamentary protocols and transcripts. They are actually obtaining the data by scraping the Parliament's website. They expressed high demand for asset declarations of MPs, which are published (mandatory by law) but only available as PDFs, in handwritten, or as scanned images) which makes the data almost useless for Chesno. The group has high actual demand for data but very high transaction costs to get it.
- o CSOs and Media organisations usually use formal request (Access to Information) to get Information and Data. According to the Law of Ukraine On Access to Public Information⁹² request for public information can be sent by e-mail.
- o Data journalism is relatively new to Ukraine. However after the Maidan protests and the fall of the old regime a lot of investigative journalism projects started in collaboration with technical and data experts in order to analyse huge datasets.
- o STILL? MISSING SUB QUESTION: Which Development Partners are using which government data in their work? What data do they want?

5.2. What is the level and nature of actual demand and latent demand for data from business/the private sector? (Importance: High)

- + The demand for data from business is growing. There is actual demand from consulting agencies, audit firms, IT internet Associations, media (investigative journalists, TV-channels).
- + There is demand for data from agricultural companies, which are interested in environmental information (soil, different hazards, climatic conditions).
- + There is also demand for crime statistics and law cases from private security agencies, private investigators. In 2013 Roman Melnyk, created the project zloch.in.ua, which makes information about crimes accessible via interactive visualisations and infographics. This project was the winner

⁸⁹ Kancelyarska Sotnya (2014). Project on asset declarations, assessed on August 12th, 2015 from:
<http://declarations.com.ua/>

⁹⁰ PROZORRO (2014). Public Procurement Platform, assessed on August 12th, 2015 from: <http://prozorro.org/>

⁹¹ Center for Political Studies and Analysis (2015). Open Budget in UA, assessed on August 12th, 2015 from:
<http://openbudget.in.ua/>

⁹² Parliament of Ukraine (2011). Law of Ukraine on access to public information, accessed on 12th August 2015 from:
<http://zakon4.rada.gov.ua/laws/show/2939-17>

on the Hackathon “SocialBoost: Open Data”, organised in 2013⁹³. The project is now supported by Private Sector as they are using the structured official crime indicators which were not accessible before.

- The group of companies "LIGA" are one of the major private companies offering ICT and data services for the Government. The system "LIGA: LAW" is installed in all courts of Ukraine, tax and customs administrations and other authorities. LIGA was a technical administrator of the Unified State Register of Regulations⁹⁴.
- + There are branches of international firms, like Microsoft that is a strong and vocal supporter for OGD. The national open data platform called data.gov.ua was developed in April 2014 by the Ukrainian CSO SocialBoost as a starting point for a national data portal. Microsoft Ukraine and the International charity Fund Renaissance (e.g. OSI Ukraine) supported the development financially.⁹⁵ In 2015, this portal was handed over to the Government (The State Agency for E-Governance) for further development and use as a state OGD portal.
- Other companies have expressed their latent demand, but are not using Government data today because it is not available in the quality and form required by the private sector. Specially geospatial data and maps, weather or transport information is not available in high-quality so it can actually be used for commercial purposes in a meaningful way.

5.3. How do public agencies listen to demands for data and respond? (Importance: Medium)

- + Some Government agencies have shown to be listening to the demand from civil society, the media and the private sector and are now pro-actively publishing information and data. For example procurement data is made available upon demand and is now accessible via the portals www.tender.me.gov.ua and www.prozorro.org.
- + In 2014 the Anti Corruption Center run a successful advocacy campaign to access real estate and cadastral information, which is now available on a website of the Ministry of Justice: www.kap.minjust.gov.ua. Anti Corruption Center also initiated a campaign to improve to Law on Public Procurement, Law of Ukraine On Government Procurement, from 10.04.2014 № 1197-VII,⁹⁶ which now mandate for state owned agencies to publish their procurement data into a central platform.
- + Most CSOs and media organisations interviewed for this assessment expressed high demand for data on budget and expenditure, asset declarations of officials, public procurement, parliamentary records, laws and court cases, and all kind of official registries, all the datasets that are relevant for transparency, accountability and to combat corruption.
- + In June 2015 a public consultation on demand for datasets was launched on the platform data.gov.ua/poll asking for feedback on which datasets should be published and in which formats.⁹⁷ The feedback from this consultation was used to inform a list of about 300 datasets to be published under the “Open Data Regulation”⁹⁸.

⁹³ SocialBoost (2013). Open Data Hackathon, accessed on August 12th, 2015 from:

<http://2013.socialboost.com.ua/blog/view/11>

⁹⁴ Unified State Register of Regulations, accessed on August 12th, 2015 from:

<http://www.reestrnpa.gov.ua/REESTR/RNAweb.nsf/wpage/RnaAbout?OpenDocument>

⁹⁵ Data Gov UA (2014). Official Website, accessed on August 12th, 2015 from: <http://data.gov.ua/about>

⁹⁶ Parliament of Ukraine (2014). Law of Ukraine On Government Procurement, assessed on August 12th, 2015 from: <http://zakon2.rada.gov.ua/laws/anot/en/1197-18>

⁹⁷ Data.Gov.UA (2015). Public consultation on datasets, assessed on August 12th, 2015 from: <http://data.gov.ua/poll> see also <http://dknii.gov.ua/content/anketa-shchodo-vyvchennya-dumky-gromadskosti-z-ptytannya-vidkrytya-baz-danyh>

⁹⁸ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of

- There is no evidence on any structured process for identifying and meeting demand for data, either from outside or inside Government. Where agencies respond to demand it happens on an ad-hoc basis. There is also no evidence on how the Government decides and sets priorities for statistical data and geospatial data.
- Although the Law of Ukraine On Access to Public Information⁹⁹ stipulates that requests must be answered within 3 days, in practice, however, some public authorities deny or limit access to requested documents with reference to privacy protection, classified information, state secrecy or documents for so called “internal use only”. This category of documents is not well defined and experts interviewed for this assessment indicated that some agencies use this label arbitrary to deny access to all kinds of information. It is worth mentioning that the requirement to answer to requests within 3 days is really short and implies the administrations have the related processes and capacities to respond in such a short time frame. Maybe something to explore and emphasize here is the lack of adequation between the very positive laws and the practical capacities, management procedures, and so on.
- There are no comprehensive official report and analysis on how many requests (and for what information) have been issued and also no report on the performance of public agencies to respond to these requests. However, representatives from CSOs and media organisations interviewed for this assessment reported that it can be very difficult and sometimes impossible to get the information and data requested, specially when its sensitive in a way that it could be used to investigate and combat corruption.
- The mechanisms for law enforcement and holding Government agencies to account for their performance appear to be weak ,not properly implemented and followed across Government agencies. This is particularly true for Government authorities at the district and city government level.

5.4. How do external stakeholders view public agencies' willingness to listen to demands for data and respond? (Importance: Medium)

- With the exception of the above mentioned public consultation on demand for datasets, most representatives from CSO and media interviewed for this assessment perceive the process for identifying and meeting demand for data from outside Government as inconsistent, unstructured and poorly developed. While the Government has actively engaged with civil society in some major policies on transparency, accountability and anti-corruption, Government agencies have not yet started to run public consultations or investigate the demand in a structured manner that could inform future planning for data collection and publication.
- Most representatives from CSO and media interviewed for this assessment expressed their frustration about not being able to access the data they need for their work. Available datasets published are often of poor quality or delivered in an unstructured formats so they can not be processed by machines. Requests to relevant high-quality data, via official requests are often denied or limited access is granted with reference to protection of privacy, state secrecy, “internal use only”or other reasons including commercial confidentiality..
- External stakeholders do not consider themselves to be involved in the setting of priorities for key national information infrastructure data such as statistics and geospatial reference data.
- + However, the new Law of Ukraine On amendments to some laws of Ukraine on access to public information in the form of open data¹⁰⁰, and the related “Open Data Regulation”¹⁰¹ for the

open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

⁹⁹ Parliament of Ukraine (2011). Law of Ukraine on access to public information, accessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/2939-17>

¹⁰⁰ Parliament of Ukraine (2015). On amendments to some laws of Ukraine on access to public information in the form

implementation of the law mandates for proactive publication of data. The regulation contains a list of about 300 datasets that must be published. The Government announced ongoing public consultations on this list, so this will change the process of indicating and responding to demand dramatically.

Assessment of the 5th dimension: Demand for Open Data

Question area	Importance	Assessment Rating	Commentary
Demand in civil society and media	High	Green	Clear evidence of data demand by civil society, researchers and media. There are several organisations that actively demand data. Some of them have established capabilities and expertise to use data for analysis, visualisation and in interactive websites.
Demand in business society	High	Yellow	Evidence of growing latent demand from private sector. Although actual reuse remains low due to little available high-quality data and/or high transaction costs.
Willingness to respond to demand	Medium	Yellow	Evidence of usage of any mechanisms which some agencies have in place for civil society to request data, and evidence of some data release in response. Public agencies take some account of demand for data in planning their collection, maintenance and publication of data, but have only recently started to actively seeking information from current or potential data users. Overall, it remains very difficult to get the data required in many cases.
Perceived responsiveness	Medium	Yellow	Some Government agencies are perceived as responding to demand, while others Government agencies are not responsive and make arbitrary use of exceptions to limit or deny access to information or data. The Access to Information Law is not followed and implemented across Government and law enforcement is not consistent.
Overall	Very High	Yellow	Clear evidence for vocal demand from civil society and media organisations, some of which extensively use Open Data. Latent demand in private sector growing also actual reuse remains low due to availability and quality of data. Willingness to respond to demand varies significantly between Government authorities. There are some examples that show great progress to release data upon request, some other examples indicate that it remains very difficult to obtain the data requested in general. Perceived responsiveness is as inconsistent and sometimes arbitrary.

Recommended Actions

Ref	Action	Responsibility	Timescale	Comments

of open data, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/319-19>

¹⁰¹ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

A5.01	Capacity building program to scale demand from civil society	Open Data Working Group, International Donors	Short to medium term	To scale the demand and capabilities in civil society to demand and reuse Open Data a dedicated capacity building program should be established. This should train members of CSO to advance their knowledge and technical skills in effective data analysis and data visualisation. A “train-the-trainers” approach is recommended to scale capacities. Donor activities in this field should be coordinated.
A5.02	Stimulate private sector demand and reuse	Open Data Working Group, International Donors	Medium to long term	To stimulate demand and capabilities to reuse Open Data in the private sector a dedicated program should be established. Such a program might start with Open Data Round Tables to bring together supply and demand side to identify gaps in availability and quality of data. Apps competitions and incubation programs dedicated to open data and innovations can also be stimulated private sector demand. Such programs should be integral part of the Open Data Initiative and efforts should be coordinated.
A5.03	Dissemination of results	Open Data Working Group	Short term	It is recommended to set up a dedicated team that ensures that release of datasets as well as pilot projects and best practice is widely disseminated. For the Open Data Initiative to be successful it needs to create narratives and examples on how Open Data was actually useful for different stakeholders. Only these compelling examples and stories will inspire others help buy in and build momentum. This activity also includes updates on all activities of the Open Data Initiative and the Open Data lifecycle (from public availability, to reuse, to impact) is essential to raise public awareness.
A5.04	Improve willingness to respond	Open Data Working Group	Medium term	The NODAP should set clear parameters on how the implementation of the Open Data Regulation will improve the willingness to listen and respond to demand expressed for Open Data across Government. Demand expressed using a mechanism build into the central data portal can help make expressed demand and actual response to this demand in a transparent manner. This mechanism should provide incentives to actively respond to demand but also provide the opportunity to file a formal Access to Information request in case expressed demand was ignored. This process of demand and response and should be transparent on the central data platform.
A5.05	Improve perceived willingness	Open Data Working Group	Medium term	The mechanism described in A5.05 can also provide an opportunity for Government bodies to explain why a specific dataset might not be made available at this point (for example because the data requires anonymisation, etc.). This publicly visible explanation increases transparency and can help make the process and perceived willingness less arbitrary.

6. Civic Engagement and Capabilities for Open Data

Importance: High

Context: Following the three-tiered approach an active and engaged civil society is a key to the success of OGD programs. Appropriate levels of capacities and skills in civil society to actually make use of OGD for evidence-based advocacy and to create pilot projects that showcase OGD usefulness and impact are also a key factor.

Questions asked in the assessment

6.1. Which potential infomediaries (such as data journalists) are able to help translate Open Data into meaningful information for the public? What actions are needed to develop or enhance these parts of the Open Data Ecosystem? (Importance: High)

- + There are a number of emerging new infomediaries in civil society and media organisations that are actively reusing OGD and are able to help translate Open Data into meaningful information for the public. Among them are SocialBoost, CenterUA, Opora, Kancelyarska Sotnya, Vox Ukraine, Chesno, Text.org.ua, Price State (www.costua.com), Visti.ua, Centre for Political Studies and Analysis.
- + In addition there are a number of independent and/or investigative journalists, IT-experts, scientists and business interested in using Open Data to become new intermediaries to assist in translation of Open Data into meaningful information for the public.
- o After the Soviet Union collapsed, Ukrainian journalists gained the freedom to develop independent associations and organisations; censorship was lifted and media outlets were allowed to earn money from advertising. The years between 1995 and 2004 constituted an era of fast growth for media. Simultaneously, though, censorship and pressure on media and journalists grew again. The death of Georgiy Gongadze, an independent journalist, was a climax of this period. Pressure and confrontation between journalists and the Government was escalating through 2004, exploding into “newsroom riots” prior to the Orange Revolution. After the Orange Revolution, journalists experienced essentially less pressure from the Government. However, it is still impossible to state that media is completely independent. Many issues remained unsolved. Although today the media market is liberated, and state owned media has much less influence, it is specially the concentration of media in the hands of view private “media oligarchs”, that represents a threat to a balanced and pluralistic media landscape. Owners often use their media products as “proof” of their status and shelter for business interests. They are known to heavily interfere in editorial policy. Bribing has become a common way of influencing the content. Paid media content, known as “jeansa” [джинса] has become common practice and effective substitute for public relations efforts.¹⁰²
- o The media industry is centralised, a few but huge private media conglomerates dominate the marked. Television is the predominant medium, and commercial channels are the most watched outlets. The industry also shows robust print media, broadcast media, and an emerging online media segment.
- o Nowadays state-owned or state-controlled media do not play a significant role anymore due to a massive privatisation in the sector before and after the Orange Revolution (2004/5). Today

¹⁰² EJC (2014). Media Landscapes Ukraine, assessed on August 12th, 2015 from: http://ejc.net/media_landscapes/ukraine

Journalism in the Ukraine is mainly organised around large media organizations, however there is a significant number of freelance/independent journalists and independent journalism associations, including the National Journalists' Union of Ukraine, the Independent Media-Union of Ukraine, the International Association of TV and Radio-Broadcasters, the Ukrainian Association of Periodic Press, the Cable Television Union of Ukraine and the Television Industry Committee, which represents the interests of Ukraine's television market and unites the most popular Ukrainian TV channels.

6.2. What activities has the government engaged in to promote reuse of government-held data (e.g., in developing apps or organizing co-creation events)? How could such promotion be developed or enhanced? (Importance: High)

- + In April 2014 the Open Data portal (www.data.gov.ua) was developed by SocialBoost with the support of Microsoft Ukraine and the assistance of the Cabinet of Ministers of Ukraine, the Ministry of Regional Development, and the State Agency for Science, Innovation and Information. The creation of this portal can be seen as a successful example of a new collaborative relation between the Government and external stakeholders. The Government of Ukraine decided with its Open Data Regulation from September 2015, to use this as a starting point of the official national Open Data Platform of the Government.¹⁰³
- + In April 2014 the Council of National Security and Defense of Ukraine in partnership with SocialBoost and UNDP organized a hackathon on communication and security in conflict¹⁰⁴.
- + In 2014 IT volunteers, with the support of the Public Joint Stock Company Commercial Bank (PrivatBank) and the ICT Competence Centre developed the public service portal [iGov.org.ua](http://igov.org.ua). The portal lists services from Government agencies to citizens and businesses indicated which services are available online and which are planned to become E-Services.¹⁰⁵ The official state portal of administrative services www.posluhy.gov.ua is not yet fully functional.
- + In April 2015 Government representatives participated in the first International Open Data Conference in Kyiv. The one-day event for Open Data professionals, Government and IT-industry leaders was jointly organised by several CSOs, media and private sector. International and Ukrainian speakers shared their experience and discussed possible ways to leverage Open Data projects in Ukraine.¹⁰⁶
- + Although the development of E-Government services is fallen behind previous commitments due to other national priorities (the war, economic crisis, corruption) the Government of Ukraine has renewed its commitment to advance digital public services with the Digital Agenda 2015, which was announced in October 2014 by the State Agency for E-Governance in Ukraine.¹⁰⁷
- + In 2014 a single-window platform was created to improve accessibility to information about the Government, its branches, activities and reforms. The website offers a lot of information, however, as of today, little data and no Open Data. See the "Report of the Government for November 2014-June 2015" as an example.¹⁰⁸

¹⁰³ SocialBoost (2014). Open Data Platform, assessed on August 12th, 2015 from: <http://data.gov.ua/about>

¹⁰⁴ SocialBoost (2015). Webpage of National Human Security Hackathon, assessed on August 12th, 2015 from: <http://security.socialboost.com.ua/>

¹⁰⁵ iGov.org.ua (2014). Public service portal, assessed on August 12th, 2015 from: <https://igov.org.ua/>

¹⁰⁶ IODC (2015). International Open Data Conference, assessed on August 12th, 2015 from: <http://iodc.org.ua/>

¹⁰⁷ UNDP CO UA (2014). Digital Agenda 2015 for Effective E-Governance in Ukraine, assessed on August 12th, 2015 from: <http://www.ua.undp.org/content/ukraine/en/home/presscenter/articles/2014/10/08/digital-agenda-2015-for-effective-e-governance-in-ukraine.html>

¹⁰⁸ Parliament of Ukraine (2014). Report of the Government for November 2014-June 2015, assessed on August 12th, 2015 from: http://www.kmu.gov.ua/document/248296387/Government_Report_June_15.pdf

6.3. What is the extent of engagement with government through social media and other digital channels? (Importance: Medium)

- + Most Government agencies at the national level have established their own channels on social media networks. Some Government agencies are very active on social media, examples include the Twitter account of the Cabinet of Ministers (5,000 Followers and more than 10,000 Tweets) or the Twitter account of the Prime Minister of Ukraine Mr.Yatsenyuk (473,000 Followers and 1,300 Tweets). Sometimes authorities publish announcement first on Twitter or Facebook before they appear on the official websites.
- o However, most social media are used as one-way channels to distribute information about Government activities. It is the exception that Government would actively seek input from citizens via these channels. At the same time most Government websites have Feedback functionalities and the Government has shown commitment to engage with Civil Society and Private Sector in consultations around some of the most important reforms in relation to administrative reform, transparency, accountability and anti-corruption. Examples include the consultation on administrative services¹⁰⁹ and the question of the legislation on access to public information and Open Data¹¹⁰.
- + In 2014 a draft legislation on e-partitions was initiated by the RPR Group (Reanimation Reforms Package initiative of CSOs and civic experts) with the support of the Center for Innovations Development (CID), a subdivision of the Kyiv-Mohyla Academy (KMA). In April 2015 a round table was organised to discuss setting up an official E-Petitioning system. To recognize validity of E-Petitions a bill was signed by President Poroshenko. The result is the Draft Law of Ukraine On Amendments to the Law of Ukraine "On Public Appeals" on electronic addresses and e-petitions, from 02.07.2015 number 577-VIII.¹¹¹ The official E-Petition website is available via the President's website: www.petition.president.gov.ua. "This is not about the use of IT to solve social problems, but about a new model of democracy, a system that will answer the question of how to make society more efficient. The success of this idea will determine how e-democracy will develop." explains Serhiy Loboyko, co-chair of the RPR E-Democracy group.¹¹²
- + Representatives from Government and CSOs interviewed for this assessment indicated that citizens want to be engaged and do actively engage wherever possible with the Government on key political and social issues. The public debate around those issues, however, is often not driven by data because Open Data is often not available to fuel the debate with evidence. The availability of Government data would significantly improve these debates and thus leverage citizen engagement.

6.4. To what extent is there an existing Apps Economy? (Importance: Medium High)

- + The younger generations in Ukraine are extensively using mobile technology to access the Internet, social media and other services using Apps on smartphones. According to the research from Factum Group Ukraine, the vast majority of Internet users are young (37% 15-29 years, and 36% 30-44 years) and the active audience is growing. Active young people are using for access to internet

¹⁰⁹ Ministry of Economic Development and Trade of Ukraine (2015). Consultations concerning improvement of of administrative services to business entities, assessed on September 19th from: <http://bit.ly/1OlkqY9>

¹¹⁰ Webpage "Civil society and authority" (2015). The question of the legislation on access to public information, assessed on September 19th, 2015 from: http://civic.kmu.gov.ua/consult_mvc_kmu/news/article/show/2700

¹¹¹ Parliament of Ukraine (2015). Law of Ukraine On Amendments to the Law of Ukraine "On Public Appeals" on electronic addresses and e-petitions, assessed on September 5th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/577-viii>

¹¹² DHRRP (2015). Bringing E-Particions to Ukraine, assessed on September 5th, 2015 from: <http://dhrp.org.ua/en/news/709-20150406-en>

- the following: mobile phones - 5.2 millions users, tablets - 1.9 millions users¹¹³.
- The IT industry is mainly focussed around Outsourcing ICT development for the global market. There is a limited number of companies developing software or Apps for the national market.
- There is only a small number of companies producing Apps for the local market. Even less companies offering value added services based on Open Data. Most Apps and Services based on Open Data have been developed by CSO and media with a focus on transparency and accountability rather than service delivery.

6.5. To what extent is there an academic or research community which trains people with technical skills or has capabilities in data analysis? (Importance: Medium)

- + Ukraine has a tradition of high level technical education, especially in engineering. Technical universities such as the National Technical University in Kiev or the National University of Radioelectronics in Kharkov prepare first-class IT-specialists and engineers. In addition some other universities offer courses on data analytics and advanced statistics.
- + The National Academy of Public Administration (NAPA), which reports to the Office of the President of Ukraine provides training program for Masters of Public Administration. The curricula includes forecasting, planning, project management, strategic management, e-governance, etc. NAPA also has a continuous education program for civil servants, with a mandatory refresher courses every five years.¹¹⁴
- + In 2015 the project E-Governance for Accountability and Participation (EGAP)¹¹⁵ was launched with the support of the Swiss Agency for Development. According to the Memorandum¹¹⁶ EGAP will be implemented throughout 2015 to 2019, to strengthen Good Governance, modern public service delivery and social innovation in Ukraine, using ICT and data as enablers. Selected partner regions are the Oblasts of Dnipropetrovsk, Odessa, Vinnytsia and Volyn.
- The Government sometimes consults with the National Academy of Sciences and the Public Councils of Ministers¹¹⁷. However, the Government appears to be preferring consultations with private think tanks and foreign experts.
- Secondary school curriculum includes basic computer science and ICT training in almost all schools throughout the country. However, the availability of modern ICT equipment and the quality of ICT education available is likely to decrease at the district and even more at the local level, due to budget constraints, and the availability of skilled staff, given the low income in the public education sector.

Assessment of 6th dimension: Civic Engagement and Capabilities for Open Data

Question area	Importance	Assessment Rating	Commentary
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¹¹³ Factum Group Ukraine (2015). Internet penetration in Ukraine 2015, assessed on September 5th, 2015 from: <http://watcher.com.ua/2015/06/12/59-ukrayintsv-korystuyutsya-internetom/>

¹¹⁴ Schedule of seminars of training for public servants on Kharkiv regional institute of NAPA, assessed on September 5th, 2015 from: http://www.kbuapa.kharkov.ua/pk/pk_seminar.html

¹¹⁵ Eastern Europe Foundation, assessed on August 12th, 2015 from: <http://eef.org.ua/en/governance-and-civil-society/410-the-e-governance-for-accountability-and-participation-egap-program.html>

¹¹⁶ Swiss Federal Department of Foreign Affairs FDFA. assessed on August 12th, 2015 from: <https://goo.gl/wT2E19>

¹¹⁷ Cabinet of Ministers (2014). The Creation of Public Councils of Ministries is regulated by Cabinet of Ministers Resolution, assessed on August 12th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/996-2010-%D0%BF>

Potential Infomediaries	High	GREEN	There are a number of specialised CSOs and media organisations playing a vital role in translating Open Data into meaningful information for citizens. There are a number of early adoptions of data journalism.
Reuse promotion	High	GREEN	There are multiple examples of government engaging with civil society or others in co-creation of apps development or promoting reuse of its' data.
Government engagement	Medium	GREEN	Government has strong record of engaging with citizens and incorporating their input into policies or decisions. A recent consultation on Open Data availability indicates a move towards engaging citizens more on data.
Apps economy	Medium High	RED	There is a notable ICT sector, even if the Apps Economy is still young and small. A critical mass of local developers exists, and as a community they are active on social media platforms or through in-person activities.
Academic community	Medium	YELLOW	Universities produce significant number of technical graduates, have track record of ICT collaboration with private sector and advanced research in leading areas like analytics, advanced statistic, semantic web technologies, etc.
Overall	High	GREEN	Government authorities have recently engaged with civil society or others in co-creation of apps development or promoting reuse of its data. A recent consultation on Open Data availability indicates a move towards engaging citizens more on data. There is a notable ICT sector, even if the Apps Economy is still young and small. Universities produce significant number of technical graduates, have track record of ICT collaboration with private sector and advanced research in leading areas like analytics, advanced statistics, and semantic web technologies.

Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A6.01	Empower new intermediaries	Open Data Working Group, International Donors	Medium term	A dedicated capacity building program should be established to build and deepen capacities in media organisations and independent journalists to become new intermediaries to engage in translation of Open Data into useful information of citizens and others. Such a program might entail basic courses as a part of the Journalistic curricula at University and modular courses for continuing education of professionals. Donor activities in this field should be coordinated.
A6.02	Promote reuse via thematic co-creation events	Open Data Working Group, State Agency for E-Governance	Medium term	Promoting Open Data reuse should be supported via a series of thematic apps development and co-creation events. These events show best results if they are not one-time-offs, but address a specific societal issue

				and are well prepared. Thematic data interventions (so called data squads) yield the best results and impacts.
A6.03	Engagement on data prioritisation via consultations	Open Data Working Group, State Agency for E-Governance	Short term, continuous	An initial consultation on Open Data has lead to the list of more than 300 datasets that has been published alongside with the Open Data Regulation. It is recommended to repeat public consultations on a regular basis to inform prioritisation and future data collection. It is important to actively approach different stakeholder groups into this process. The consultation and its results should be published transparently on the central data platform.
A6.04	Support the local Apps economy	State Agency for E-Governance	Medium to long term	Apps competitions and dedicated programs (incubation, seed-funding, acceleration) should be initiated to support start-ups and SMEs to create innovations, economic value and jobs through the development of Apps and new services based on Open Data.
A6.05	Engage Academic communities	Open Data Working Group, State Agency for E-Governance	Medium to long term	It is recommended to actively engage the academic communities in the process of Open Data as they play a vital role in capacity building for the next generation of ICT developers and data scientists. Moreover, the Government needs to build a network of trust to the local academic community as a pool for domain expertise and advice.

7. Funding an Open Data Program

Importance: Medium High

Context: Funding with respect to both the “supply side” and “demand side” of Open Data is important to ensure that the objectives of an Open Data Program are met.

Questions asked in the assessment

7.1. How could resources be identified to fund an initial phase of an Open Data Program? Who would need to take what action to do so? (Importance: Very High)

- o The State Agency for E-Governance has initial funding of 700 000 UAH (about 30,000 USD) has been allocated for the initial stage to coordinate activities related to the implementation of the “Open Data Regulation”¹¹⁸. It is evident that this initial budget is very limited and will not allow to scale activities across government agencies. The funding might be used for developing the national Open Data portal at www.data.gov.ua and organise the supply of data into the portal.
- + There are several existing Government programs that could contribute to funding an Open Data

¹¹⁸ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

Program, including: The National Program of Informatization of Ukraine¹¹⁹; the National Action Plan for the implementation of the Open Government Partnership in 2014-2015¹²⁰, and other.

- + Several donor and development partners have indicated an interest in Open Data or Open Government issues, including: UNDP, USAID, DFID, OSI, GIZ, World Bank, and others. These donors have already shown their commitment by supporting related initiatives and programs over the last years.
- o Experts interviewed for this assessment stated that the Open Data Initiative needs its own budget line in the state budget. Such a budget line might be proposed by the Prime Minister or his office and must be approved by the Budget Committee of the Parliament, www.budget.rada.gov.ua.
- o Little thoughts has been given to developing the business case for an Open Data Program, as the benefits for Open Data are mostly identified as in OGD for transparency, accountability and to reduce corruption. Although benefits of OGD such as Government efficiency and cost reduction via more efficient use of public resources, better policy decisions has been explained and discussed in detail, these aspects are not of top priority for the Government at this point. Perhaps saving tax money by reducing corruption for example in public procurement might become a compelling argument for the Government.
- o The armed conflicts in the East of Ukraine and the political-economic crisis obstruct the development of a national policy and developments in the field of ICT, E-Governance and the release of Open Data, as most of the budget is currently spent to support the national defense and rescuing the economy from collapse.

7.2. What if any resources exist or have any been identified to fund development of initial apps and e-Services that will use Open Data? (Importance: High)

- + The State Agency for E-Governance has some initial funding for the development and introduction of the "Electronic System of Interaction between Bodies of Executive Power".¹²¹ The system is designed to automate the processes of creating, transmission, processing, and storage of electronic documents and copies of paper documents that do not contain classified information using a digital signature.
- + The State Agency for E-Governance in collaboration with State Archives - Construction Inspection of Ukraine is implementing four administrative E-Services in construction, such as: the Registration of Notification and declaration about start of preparation works; the Registration of notification and declaration about start of construction works.¹²² The funding for this project came from the budget of the State Archives Construction Inspection of Ukraine and the State Agency for E-Governance¹²³.
- + In 2015 the State Agency for E-Governance has allocated a budget of 700,000 UAH (\$ 31,717 USD) for the development of the national Open Data porta. The budget program "E-government and the National Informatization Program" for 2015 was approved by the joint order of the Ministry of

¹¹⁹ Parliament of Ukraine (1998). Law of Ukraine "On the National Informatization Program", assessed on September 19th, 2015 from: <http://zakon4.rada.gov.ua/laws/show/74/98-%D0% B2%D1%80>

¹²⁰ Parliament of Ukraine (2014). Decision of Cabinet of Minister of Ukraine "On Approval of the Action Plan for Implementation of the Open Government Partnership Initiative in 2014-2015", assessed September 19th, 2015 from: <http://zakon3.rada.gov.ua/laws/show/1176-2014-%D1%80/paran11#n11>

¹²¹ State Information Resources (2015). System of Electronic Interaction between Executive Bodies, assessed on September 9th, 2015 from: <http://bit.ly/1FV8Z8j>

¹²² State Archives - Construction Inspection of Ukraine (2015). Electronic administrative services, assessed on September 9th, 2015 from: <https://e-dabi.gov.ua/>

¹²³ State Agency for e-governance of Ukraine (2015), In Ukraine begun working admin electronic services in construction, assessed on September 15th, 2015 from: <http://dknii.gov.ua/content/v-ukrayini-zapracyuvaly-elektronni-adminposlugy-u-sferi-budivnyctva>

Regional Development, Construction and Housing and the Ministry of Finance from 29.09.2015 №243 / 842. It provides funding for the creation of the Single State open data web portal (the first stage) (informatization) to be build using the prototype developed by SocialBoost at www.data.gov.ua. Currently, the State Agency for E-Governance has initiated the bidding process to determine the vendor for this work.

- Other authorities are required to use their own budget lines to publish Open Data and transfer data for Open Data portal,¹²⁴ which might represent challenges to Government authorities as they have no allocated resources for this, and could experience significant shortfalls both in financial and human resources as well as in having sufficient tech-savvy staff.
- o There are existing projects funded by UNDP, USAID, International Renaissance Foundation, and other donors that could make a contribution to funding the development of initial apps and services based on Open Data.

7.3. What funding is available to support the necessary ICT infrastructure and ensure enough staff have the skills needed to manage an Open Data Program? (Importance: Medium High)

- o While the initial phase of an Open Data Initiative must not be expensive and can be done with the limited resources available, it is clear that more substantial investments will be required to support the necessary ICT infrastructure and ensure enough staff have the skills needed to manage an Open Data Program across Government agencies. This more substantial funding for the second stage of the implementation has not yet been secured. There is a risk, that the Open Data Regulation might not be implemented consequently across Government, which would seriously undermine its potential for having positive social and economic impacts.
- o Main issues to overcome include the replacement and/or upgrade of ICT legacy systems in Government agencies. As outlined in the 3rd and 4th dimension of this assessment the ICT systems in Government are mostly isolated and custom made solutions present at agency level, which are the obstacles for interoperability and standardisation. To scale an Open Data initiative substantive efforts and investment are needed to coordinate ICT issues across Government.
- o The State Agency for E-Governance has dedicated staff for data management, to coordinate the overall Open Data program. However, they have limited resources and not enough skilled staff to effectively support other key agencies with the implementation.
- o Government agencies that have dedicated staff for data management, include: The Ministry of Justice of Ukraine, The Ministry of Finance of Ukraine, State Fiscal Service of Ukraine.
- o There is no funding in key agencies to get data supplied to an Open Data Portal (including curation and cleaning of data). Although most agencies have some technically skilled staff. It is most likely that these civil servants will need further training and that more technical savior officials are needed across agencies.

7.4. What funding mechanisms does the government have for innovation? (Importance: Medium High)

- o The Government has very limited fundings for the development of applications or E-Services.
- o The Government is aiming to improve the investment climate for local and foreign investments with a set of reforms and regulations. However, the Government has no dedicated programs to support or promote entrepreneurship, start-ups or development of SMEs.
- + However, there are some investment programs, including incubator and accelerator programs

¹²⁴ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

funded by private venture capital and/or foreign investment, including Aventures Capital¹²⁵, UAngel¹²⁶, and UVCA¹²⁷.

- + International donor organisations including UNDP, USAID, DFID, OSI, GIZ, World Bank, and others have invested substantially to build the capacity in civil society over the last years. Those donors show commitment to allocate funding for programs to promote transparency and accountability and strengthen Good Governance and the rule of law.
- o Private-Public-Partnerships (PPPs) do not play a significant role in Ukraine today. This is partially because of the continuing predominant role of State Owned Enterprises and some negative experiences with PPPs in the past. In contrast, a new Public-Private Partnership (PPP) Development Program, in cooperation with the Ministry of Economic Development and Trade of Ukraine and the Association of Ukrainian Cities (AUC) is funded by USAID. It focuses mainly on regional and local Governments. In February 2015 a Guide to Public-Private Partnerships in E-Government¹²⁸ was published.

Assessment of 7th dimension: Funding an Open Data Program

Question area	Importance	Assessment Rating	Commentary
Initial phase resources	Very High	YELLOW	A limited amount of resources (people and money) are available for initial work on an Open Data Program – and government shows readiness to consider budgeting for it. To be able to effectively manage and coordinate the implementation more substantial funding to build and maintain the necessary capacities and dedicated skilled personnel the funding for the initial phase needs to be increased significantly.
Initial app funding	High	RED	Although few Government agencies have started to develop E-Services there is no substantial funding for the development of Apps and services based on Open Data at the moment.
ICT infrastructure and skill funding	Medium High	RED	No adequate ICT infrastructures exist, civil servants do not receive reasonable technical training. Substantial investments in ICT systems and capacity building are required.
Innovation funding	Medium High	RED	Government currently makes no direct investments in innovation, SMEs or ICT industry development due to other national priorities. However, private investment and international donors support entrepreneurship and innovation programs.
Overall	Medium High	RED	While an Open Data Program must not be expensive in the initial phase, and limited funding for it might be available via existing budget lines of agencies, there is an evidence that some more adequate investments will be required to scale the program

¹²⁵ Aventures Capital (2015). assessed on September 19th, 2015 from: <http://aventurescapital.com/>

¹²⁶ Uangel (2015). Ukrainian Business Angels Network, assessed on September 19th, 2015 from: <http://uangel.com.ua>

¹²⁷ UVCA (2015). Ukrainian Venture Capital and Private Equity Association, assessed on September 19th, 2015 from: <http://uvca.eu/>

¹²⁸ Public-Private Partnership Development Program (2015). Guide to Public-Private Partnerships in E-Government, assessed on September 9th, 2015 from: <http://ppp-ukraine.org/wp-content/uploads/2015/03/PPPs-in-e-Gov-Guide.pdf>

		<p>across Government and make it sustainable. There is a risk that a requirement to publish Open Data to the central portal might exceed the financial and human resources of many Government authorities. To make the Open Data program operational and sustainable requires more investments in renewing, updating the Government ICT systems and software and in scaling capacity building programs across Government. A dedicated budget line should be allocated to secure sufficient funding for the program. At the same time several donor organisations are financing related programs and it would provide an opportunity to join forces and perhaps build a coalition of donors to share the future funding of Ukraine's Open Data program.</p>
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Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A7.01	Secure funding for initial phase	Parliament of Ukraine, State Service for E-Governance	Immediate	Initial funding for the coordination of the ODWG and the development of the NODAP must be secured. This includes funding for coordination; initial basic capacity building; development of the pilot data portal into a official and operational data portal; supply of datasets into the central portal; support actions to help other Government organisations to publish data into the central portal, and other support actions including dissemination and organisation of public events and consultations. As a first step the State Agency for E-Governance should develop a realistic budget for the initial phase, the second phase, of the implementation of the Open Data Regulation.
A7.02	Secure funding for the implementation phase and capacity building	Parliament of Ukraine, State Service for E-Governance	Short term	A adequate funding must be allocated via a separate budget line in the state budget to secure sufficient funding is available to implement the Open Data Regulation across Government. It is important that the State Agency for E-Governance as the coordinator is sufficiently supported, but also that there is funding to support related activities in all participating Government organisations.
A7.03	Funding for Apps and E-Services	Parliament of Ukraine, State Service for E-Governance	Medium term	Funding for the development of new digital public services, especially E-Services and Apps that reuse data should be set up in collaboration with development partners as separate programs.
A7.04	Funding for ICT infrastructure and skill base	Parliament of Ukraine, Development partners	Medium term	A broader investment program must be set up to renew and update legacy ICT infrastructure across Government, this should be aligned with the introduction of the new Electronic Interaction System of Executive Bodies and the Unified State System of Electronic Document Exchange. Adequate capacity building for civil servants must go along with the introduction of the new systems. Wider capacity building programs to leverage the overall ICT skill are also recommended.
A7.05	Innovation funding	Parliament of Ukraine, Development partners	Long term	Funding for Startups and SME to leverage Innovation in ICT in order to create new products and services should be set up in collaboration with development partners as separate programs.

8. National Technology and Skills Infrastructure

Importance: High

Context: In very practical ways, Open Data Programs normally rely for their success at least in part on the national technology infrastructure, in terms of technology and communications services and the ICT skills among officials, infomediaries and the general public.

Questions asked in the assessment

8.1. What is the local ICT “ecosystem”? Which technologies reach what proportion of citizens? **(Importance: High)**

- + According to the Report “Measuring the Information Society 2014”¹²⁹, of the International Telecommunication Union, Ukraine ranks 73th out of 166 countries. One reason for Ukraine's low score is irregularity of the access to ICTs in the region. In the regions of Ukraine penetration of Internet is: cities with a population over 100,000 - 68%, cities with a population of less than 100,000 - 62 %, rural area - only 45%.
- + A research on the Internet audience throughout Ukraine (excluding the Crimea) by Factum Group Ukraine¹³⁰ estimates the total number of Internet users increased to 59% of the population. While the vast majority of Internet users are young (37% 15-29 years, and 36% 30-44 years) the active audience is growing older: every 10th Ukrainian aged over 65 years is using the Internet.
- + According to the GemiusAudience research on Internet usage¹³¹ conducted by GemiusUA in July 2015, the total audience breaks down as follows: PC users: 18.2 millions, Mobile phones: 5.2 millions, Tablets: 1.9 millions. According to GemiusAudience study the proportion of users who are use the Internet in the regions: 24% West, 32% Center & North, 34% East, 10% South.

8.2. What is the level and cost of internet access, both by broadband and by mobile technologies? **(Importance: High)**

- + According to various surveys, there are 19-24 million Internet users in Ukraine. Although numbers are increasing, the level of Internet penetration in Ukraine is among the lowest in Europe¹³². According to the report Internet Trends-2015, by Kleiner Perkins Caufield, Ukraine is one of those countries with less than 45% of its population having access to the Internet, with about 19 million users and dynamical growth of 23% last year.¹³³
- + Ukraine has three major mobile operator: Kyivstar, MTS Ukraine, Astelit (™ life:), together they cover 99.9% of the territories of Ukraine. Kyivstar occupies 44% of the market, MTS Ukraine 34%,

¹²⁹ ITU (2014). Measuring the Information Society 2014, assessed on 6th September 2015 from:

http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf

¹³⁰ Factum Group Ukraine (2015). Internet penetration in Ukraine 2015, assessed on 5th September 2015 from:

<http://watcher.com.ua/2015/06/12/59-ukrayintsiv-korystuyutsya-internetom/>

¹³¹ GemiusAudience estimates (2015). assessed on 5th September 2015 from: <http://www.gemius.com.ua/vse-statidlia-chtenija/internet-auditorija-ukrainy-ijul-2015-goda.html?file=files/UA/Presentation/GemiusAudience%20Presentation%20July%202015.pdf>

¹³² Green Paper on the electronic governance policy in Ukraine (2015), p.15, assessed on 05th September 2015 from: <http://etransformation.org.ua/2014/11/24/355/>

¹³³ Kleiner Perkins Caufield (2015). Internet Trends 2015, assessed on 05th September 2015 from: <http://www.kpcb.com/blog/2015-internet-trends>

and Astelit 18%. Another 4% of the market (2.5 million subscribers) is served in networks by smaller operators Intertelecom, Ukrtelecom, People.net. The number of subscribers (active SIM cards) increased to 59.5 millions, up 0.2 millions from 1Q 2015 and penetration increased to 130,9% (up 0.5% from 1Q 2015)¹³⁴.

- The cost of high-speed Internet access is relatively low and affordable to large parts of the population. The average cost of communication services to Ukrainian: prepaid mobile cellular tariffs, PPP \$/min is 0,19 USD/1 min., fixed broadband Internet tariffs, PPP \$/month - 14,10 USD/month. Internet & telephony competition, 0-2 (best) - 1,86¹³⁵. The cost of Internet access depends on the service, region and method of connection to the network (in 2014 the average cost of Internet access in Ukraine is \$ 0.84 for 1 Mbit/s. For comparison: in the USA its \$ 6.8.¹³⁶
- While most Government agencies at the national level have established their own web presents, the development of e-services is much less established across Government. There is only a few e-services available, including e-services from State Archives - Construction Inspection of Ukraine: Registration of Notification and declaration about start of prepare works, Registration of Notification and declaration about start construction works¹³⁷. There is available special portal of e-services kap.minjust.gov.ua from The Ministry of Justice of Ukraine (obtaining of information references from different registers and other). In accordance with the results of the United Nations E-Government Survey 2014¹³⁸, Ukraine ranked 87th of 193 UN member countries in 2014. In 2012, Ukraine was ranked 68th and in 2010 54th.
- According to the Global Information Technology Report 2015¹³⁹, by the World Economic Forum (WEF), Ukraine ranks on 71th positions of 143 countries. Its closest neighbors are in higher positions: Moldova 68th, Romania 63th, Slovakia 59th, Hungary 53th, and Poland 50th.
- The highest ranking positions of Ukraine in Networked Readiness Index (Global Information Technology Report¹⁴⁰) was actually achieved in 2009 (62th position). In recent years, Ukraine is concedes and CIS countries and Eastern Europe, given the expansion of the countries participating in the rating. 71th Ukraine's place in the world ranking points to the lack of a clear plan for government implementation and use of ICT to improve the competitiveness of the country.

8.3. How readily available is computer and store infrastructure? (Importance: Medium High)

- + In January 2015 a study of the data center market in Ukraine¹⁴¹ was conducted by Expert &

¹³⁴ AC&M-Consulting (2015). AC&M-Consulting estimates, assessed on 15th September 2015 from: http://www.acm-consulting.com/data-downloads/doc_download/142-2q-2015-cellular-data.html

¹³⁵ Economic debating club (2015), Networked Readiness Index Ukraine and its components, assessed on 05th September 2015 from http://edclub.com.ua/sites/default/files/files/ict_2015.pdf

¹³⁶ Networks & Business (2014). Broadband Internet access in Ukraine are waiting for 3G / 4G, assessed on 05th September 2015 from: http://sib.com.ua/arhiv_2014/2014_2/statia_1_1/statia_1_1_2014.htm

¹³⁷ State Agency for e-governance of Ukraine (2015), In Ukraine begun working admin electronic services in construction, assessed on 15th September 2015 from: <http://dknii.gov.ua/content/v-ukrayini-zapracyuvaly-elektronni-adminposlugy-u-sferi-budivnyctva>

¹³⁸ United Nations Public Administration Country Studies (2015), E-Government Survey 2014, assessed on 15th September 2015 from: http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf

¹³⁹ World Economic forum (2015). The Global Information Technology Report 2015, assessed on 05th September 2015 from: http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf

¹⁴⁰ World Economic Forum (2015), Global Information Technology Report 2015, assessed on 05th September 2015 from:

http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf

¹⁴¹ Internet.ua, Study of the data center market in Ukraine, assessed on 5th September 2015 from: <http://internetua.com/kommercseskie-data-centri-podveli-itogi-2014-goda>

Consulting. The study assessed data centers and suppliers of cloud solutions (SaaS PaaS IaaS). The companies leading in market growth where BeMobile, DeNovo, Ukrtelecom and Volya.

- There is a total of 31 commercial data centers operated in the Ukraine. Of these, only one data center (The Park), has been certified at the appropriate level of reliability (Tier III) by The Uptime Institute. Experts stated that Ukraine needs between 5-9 data centers in this category. See a rating of commercial data centers in Ukraine.¹⁴²
- In 2014 the country witnessed a continued outflow of clients from Ukrainian data centers to foreign data centers. During last years in Ukraine where the resonance assaults on servers of data centers and telecom companies from law enforcement authorities. This withdrawals have undermined trust in the reliability of Ukrainian data center. There are reports of some large resource owners and small hosting companies who moved their data to countries with a more secure environment.¹⁴³

8.4. How strong are the IT industry, developer community and overall digital literacy? (Importance: High)

- + The ICT sector has grown over the past few years due to the expansion of the domestic market, the demand for ICT service exports from Ukraine and by improving the efficiency of legal regulation of the sector, which was, in particular, driven by the active participation of business associations and CSOs.
- + According to the State Statistics Service the share of IT sector in the country's GDP amounted to 1.99% for the 1Q 2015.¹⁴⁴
- + In the first half of 2015 the volume of industrial production by type of activity "Manufacture of computer, electronic and optical products" in Ukraine totaled 3.08 billion UAH (0.4% of the total sales), which is 0.3% more than the same period of 2014. The volume of new orders for industrial production by the same type for the first half of 2015 amounted to 2.96 billion UAH, 76% more than the same period in 2014.¹⁴⁵
- During the first half of 2015 the volume of foreign direct investment in Ukraine (equity) in enterprises with economic activity in "Information and Telecommunications" was 1760,5 billion USD or 4.1% of total foreign direct investment, which is 2.4% less than a year ago.¹⁴⁶

Assessment of the 8th dimension: National Technology and Skills Infrastructure

Question area	Importance	Assessment Rating	Commentary
ICT penetration	High	GREEN	Internet access (especially broadband) is significant and affordable with growing availability across the country. Mobile penetration is high and affordable for a large segment of

¹⁴² Expert & Consulting (E&C) estimates (2015), assessed on 6th September 2015 from:
http://www.encint.com/ratings/rating_datacenter_2014

¹⁴³ Internet.ua, Study of the data center market in Ukraine (2015), assessed on 5th September 2015 from:
<http://internetua.com/kommerceskie-data-centri-podveli-itogi-2014-goda>

¹⁴⁴ State Statistic Services of Ukraine, assessed on September 6th 2015 from: www.ukrstat.gov.ua

¹⁴⁵ National Commission for State Regulation of communications and informatiation, assessed on September 6th 2015 from: <http://nkrzi.gov.ua/index.php?r=site/index&pg=151&language=uk>

¹⁴⁶ National Commission for State Regulation of communications and informatiation, assessed on September 6th 2015 from: <http://nkrzi.gov.ua/index.php?r=site/index&pg=151&language=uk>

			population.
Level of internet services	High	YELLOW	Government has a notable number of information management systems, though many/most do not interoperate.
Computer and storage availability	Medium High	GREEN	Computer and storage are available to affordable prices across the country. However recent allegations on the security levels of servers in Ukrainian data centers and telecom companies from law enforcement authorities have lead to mistrust and as a result withdraw to forrain data centers that appear to have higher security standards.
IT sector, developer community, digital literacy	High	YELLOW	Basic education levels are high, Media and IT literacy is not only confined to citizens in cities. Strong ICT sector but startup scene only nascent. There are some programs to support entrepreneurship and innovations, however most are funded by external partners. ICT sector should be supported to produce for the local market rather than focus on outsourcing.
Overall	High	YELLOW	Internet penetration throughout the country is robust (above 40%) and affordable. Specially access via mobile technologies is available and growing fast. Storage, hosting, computing and cloud infrastructure is available at affordable prices. Although the Government has a notable number of information management systems, most do not interoperate. Availability of E-Services is low. Innovation programs and incentives for the ICT sector to produce for the local market are required. Education levels are high, although programs to leverage ICT and media literacy are needed to address and overcome digital divide.

Recommended Actions

Ref	Action	Responsibility	Timescale	Comments
A8.01	Improve E-Services	Parliament of Ukraine, State Service for E-Governance	Medium term	A dedicated program to leverage the availability of E-Services across Government must be coordinated by State Service for E-Governance. Mandatory standards for such E-Services should be established by State Service for E-Governance to ensure interoperability between systems.
A8.02	Availability of secure computing power and storage	Parliament of Ukraine, State Service for E-Governance	Medium term	The Government should ensure that there are reliable, and secure computing power and storage available to affordable prices for Government ICT. It is key that Government ICT centers offer high standards of system, network and data security while being interconnected with each other. In some cases this will be done via dedicated state run Computer centers, in some cases The infrastructure of choice will be cloud based, the security aspects are particularly relevant for any cloud services the Government might use to run

				certain parts of its digital infrastructure.
A8.03	Strengthen the ICT sector, entrepreneurship and innovations	State Service for E-Governance, Development partners	Long term	Dedicated programs to support entrepreneurship and innovations should be set up and coordinated with development partners.
A8.04	Supporting local developer community	ODWG, Development partners	Long term	Supporting the local developer community to engage with Open Data is key for the success and sustainability of the Open Data Initiative in Ukraine. Engaging the developer community should be coordinated by the Open Data Working Group and entail various activities including public events, apps competitions, co-creation events, and capacity building. Perhaps international programs like School of Data and/or Code for All could be models to establish a network of civic technologists across the country. These activities should be coordinated with and co-financed by development partners.
A8.05	Bridging the digital divide	State Service for E-Governance	Long term	Special programs to address and reduce the digital divide are recommended. Special focus programs on young women elderly people, communities in rural areas or marginalised groups should be implemented and coordinated with Development partners to create a more inclusive society and improve social mobility.

Conclusions

This Open Data Readiness Assessment is designed to produce a rapid evaluation of a Government's readiness to introduce and sustain an Open Data initiative. In doing this, the Assessment looks at eight dimensions. While each dimension is important, the Assessment methodology gives each a weighted rating of relative importance.

Dimension	Importance	Assessment Rating	Commentary
1. Senior leadership	Very High	YELLOW	As a result of the Euromaidan Revolution in 2014 citizen demanded for the new Government to become more transparent, accountable and to take serious actions against corruption. In response the new Government of Ukraine has set an ambitious reform agenda to leverage transparency, accountability, access to information and open data. At the same time corruption is perceived as widespread across Government and society. The challenges are not only to ensure coherent implementation of the reform agenda and strengthen the rule of law and law enforcement, but also to change the mindset of

		YELLOW	people and to establish a culture of transparency and accountability. Although Ukraine has made commitments to international initiatives such as OGP and EITI both process were almost stalled during the 2014 crisis. The new Government has yet to prove that it will take the OGP process more seriously in the future. The Government will be held to account on its ability to actually implement its ambitious promises and reform agenda. Although Open Data is introduced to higher level public servants, there is a lot of confusion about what it actually means. More sensitisation and capacity development is needed to establish a common understanding of the basic concepts and implications of Open Data.
2. Legal and policy framework	Very High	YELLOW	The overall legislative framework of the Ukraine represents a supportive environment for Open Data initiatives, however significant parts of laws and reforms are either very new or still in process, thus implementation is not always consistent. Public officials need specific guidelines and training on how to implement the new legislation and regulations correctly. The protection of privacy is regulated by law but not all Government agencies have established robust mechanisms and practices to guarantee and safeguard the protection of privacy in practice. The progressive Access to Public Information Law is very supportive and has specific requirements for OGD. In practice, however, the law is not implemented consequently across Government. Particular the new Open Data Law and its Regulation are strong but have not yet been implemented. One challenge for the Government is to ensure that the ambitious initiatives and reforms will be implemented properly and in a timely manner.
3. Institutional structures, responsibilities, capabilities	Medium High	YELLOW	No single agency appears to be suited to lead the Open Data program across Government alone. However supported with the political weight of the Cabinet of Ministers and in cooperation with the Open Data Working Group, the State Agency for E-Governance has mandate and technical competency to be an ideal candidate to lead an Open Data Program. Data management capabilities and interagency ICT coordination needs to be leveraged to overcome isolated and incompatible IT legacy systems and improve interoperability and standardisation. Although some Ministries have concerns releasing Open Data, there is indication that most authorities are willing to move and release data in accordance with the Open Data legislation. Capacity development programs are necessary to train more public servants with advanced technical skills in data management, advanced statistics and data analytics.
4. Government data management policies	High	YELLOW	There are no coherent information management policies or standards for information and data security, data quality, including provenance, accuracy, timeliness and completeness consistently implemented across Government. No coherent view on data holdings at Government as-a-whole. Some Government data remains paper based and data in formats that can be processed by machines is often not published even if it exists inside Government. Data quality is also often an issue. Data sharing happens on a case by case basis and obtaining data is generally difficult and inefficient. There are no anonymization practices implemented across Government agencies to safeguard the protection of personal data.

5. Societal demand for Open Data	Very High	GREEN	Clear evidence for vocal demand from civil society and media organisations, some of which extensively use Open Data. Latent demand in private sector growing also actual reuse remains low due to availability and quality of data. Willingness to respond to demand varies significantly between Government authorities. There are some examples that show great progress to release data upon request, some other examples indicate that it remains very difficult to obtain the data requested in general. Perceived responsiveness is as inconsistent and sometimes arbitrary.
6. Civil engagement and capabilities for Open Data	High	YELLOW	Government authorities have recently engaged with civil society or others in co-creation of apps development or promoting reuse of its data. A recent consultation on Open Data availability indicates a move towards engaging citizens more on data. There is a notable ICT sector, even if the Apps Economy is still young and small. Universities produce significant number of technical graduates, have track record of ICT collaboration with private sector and advanced research in leading areas like analytics, advanced statistics, and semantic web technologies.
7. Funding Open Data program	Medium High	RED	While an Open Data Program must not be expensive in the initial phase, and limited funding for it might be available via existing budget lines of agencies, there is evidence that some more adequate investments will be required to scale the program across Government and make it sustainable. There is a risk that a requirement to publish Open Data to the central portal might exceed the financial and human resources of many Government authorities. To make the Open Data program operational and sustainable requires more investments in renewing, updating the Government ICT systems and software and in scaling capacity building programs across Government. A dedicated budget line should be allocated to secure sufficient funding for the program. At the same time several donor organisations are financing related programs and it would provide an opportunity to join forces and perhaps build a coalition of donors to share the future funding of Ukraine's Open Data program.
8. National tech and skills infrastructure	High	YELLOW	Internet penetration throughout the country is robust (above 40%) and affordable. Specially access via mobile technologies is available and growing fast. Storage, hosting, computing and cloud infrastructure is available at affordable prices. Although the Government has a notable number of information management systems, most do not interoperate. Availability of E-Services is low. Innovation programs and incentives for the ICT sector to produce for the local market are required. Education levels are high, although programs to leverage ICT and media literacy are needed to address and overcome digital divide.

It is important to note that all Governments have their own combination of challenges and comparative advantages as they implement Open Data initiatives. Open Data offers opportunities for every Government to leverage transparency and accountability, combat corruption, engage citizens, drive innovation, and improve public services in new ways.

Ukraine's political, economic, social and cultural context presents a complex environment of opportunities and challenges for the introduction of an Open Data initiative. Although there are a number of critical challenges presently for the introduction of an Open Data initiative in Ukraine, there is also a window of

opportunity and sufficient commitment from political leaders and high level Government officials to introduce an Open Data initiative with a series of pilot projects that can showcase the positive impacts of Open Data in sectors that are key for the national development strategy of Ukraine. Recognizing the overall challenging situation, this assessment concludes with the recommendation to focus on making Open Data available where that is easy to do so, and to establish and strengthen the Open Data Working Group Government at the Cabinet of Ministers to become a truly multi-stakeholder working group with representatives from Government, civil society, private sector and academia to become the focal point and driver of the development and implementation of the National Open Data Action Plan.

In addition this assessment recommends the identification, design, implementation, evaluation and dissemination of a set of pilot projects to quickly create a few practical examples of the usage of Open Data that can serve as example for further extension of the Open Data initiative. To be operational pilot projects should be developed in thematic areas / sectors which have a priority in national policy and national development goals (SDGs). Since one of the Government's main priorities is to reduce corruption, it is recommended to focus on pilot projects and datasets that are directly related to fiscal and budget transparency, public procurement, and beneficial ownership of companies. Key datasets for these pilots include: detailed and disaggregated budget and spending data, public procurement data, key central registers, such as cadastral, land and property ownership, company register, including information on beneficial ownership and many more. The development of specific pilot projects with the related requirements for the datasets required should be developed by the ODWG.

The design and implementation of such pilot projects should be coordinated by the Open Data Working Group and the State Agency for E-Governance in cooperation with the data holders and those stakeholders in civil society and private sector that want to reuse the data to create social and economic value. An open and collaborative process can help the Government and its stakeholders in civil society and the private sector to build a relationship of trust and a better understanding of how to make Open Data useful for all stakeholders in Ukraine. The lessons learned from the process of the multi stakeholder ODWG alongside with the implementation of the pilot projects should form the further development of the national Open Data action plan, which is aligned with the national development priorities, related reforms on democratisation, Access to Information, Anti-Corruption as well as the national e-Government strategy and other relevant policies to address the challenges identified within the eight dimensions and take the necessary and more substantial actions to overcome them.

For a set of recommended actions please see the Action Planning section in the Appendix.

Appendices

A. Glossary

Open Data	Data in machine-readable format that is publicly available under an “open” license that ensures it can be freely used/reused/redistributed by anyone for any legal purpose.
Open Data Program	A set of actions designed to introduce and manage Open Data by a Government, Agency, organization or company. The Assessment focuses on Open Data Programs developed by Governments or individual public sector Agencies.
Open Data Ecosystem	An approach to Open Data that focuses not only on data but on the larger environment for Open Data—its “ecosystem”—including other key dimensions like leadership, policy/legal framework, institutions, infrastructure and the state of user communities (like developers, universities, private sector).
Open Data Portal	A platform (usually accessed as a website) that at a minimum acts as a catalogue providing a single point of access for the public to search and access Open Data available from a Government, Agency or organization.
Open Government	A philosophy or principles for Government that focus on changing how Government works to make it more transparent, accountable, participatory (with greater citizen engagement) and collaborative.
Open Government Partnership	A global partnership of Governments dedicated to implementing domestic reforms that make Government more open, accountable, and responsive to citizens. Launched in 2011, the OGP now has over 60 member countries.
Open Standards	Technical standards that are publicly available, non-proprietary and can be implemented on a royalty-free basis. Often open standards are also developed in an “open” transparent process that enables a larger group of people to contribute to their development.
Archiving	The storing of records, documents, or other materials of historical interest (or a collection of them) in a defined place or repository.
Data Management	The development, execution and supervision of plans, policies, programs and practices that control, protect, deliver and enhance the value of data and information assets.
Metadata	Metadata is “data about data” – meaning data that describes basic aspects of a dataset, for example when the dataset was created, which Agency is responsible for the dataset, the format of the data, last update, etc.
Infomediary	A person or entity that helps make data/information more easily understandable to a broader audience such as the general public. For example, the media are important infomediaries for sharing information with the public in a more understandable way.

B. List of meetings and interviews conducted

List of ODRA Meetings

Organization	Date
NGO Scientific and research Centre for Legal Informatics	10/08/2015
Spilno TV	10/08/2015
State Agency for E-Governance of Ukraine	10/08/2015
Council of Europe	10/08/2015
Association of IT Enterprises	11/08/2015
National Academy of Public Administration	11/08/2015
NGO OPORA	11/08/2015
NGO E-Democracy	11/08/2015
NGO Podillya Agency for Regional Development	12/08/2015
NGO Social Boost	12/08/2015
NGO CHESNO	12/08/2015
NGO Centre UA	12/08/2015
NGO Dostup do pravdy	12/08/2015
NGO Anti Corruption Action Centre	12/08/2015
NGO Innovation Kyiv Mohyla Academy	13/08/2015
Microsoft Ukraine	13/08/2015
Administration of zloch.in.ua	13/08/2015
State Agency for E-Governance of Ukraine	14/08/2015
NGO Centre for Political Studies and Analysis	14/08/2015
Council of Europe	14/08/2015
NGO Institute of Media Law	14/08/2015
Kantseliarska sotnya - "Stationery Hundred" initiative	14/08/2015
State Enterprise "Information and Resource Center"	20/08/2015
State Archives - Construction Inspection of Ukraine	21/08/2015

The Ministry of Regional Development, Building and Housing of Ukraine	25/08/2015
State Service of Special Communication and Information Protection of Ukraine	27/08/2015
State Migration Service of Ukraine	27/08/2015
State Agency for E-Governance of Ukraine	27/08/2015
The Ministry of Economic Development and Trade of Ukraine	28/08/2015
The Ministry of Infrastructure of Ukraine	02/09/2015
The Ministry of Justice of Ukraine	03/09/2015
Secretary of Cabinet of Minister of Ukraine	04/09/2015
International Renaissance Foundation	21/09/2015
The Ministry of Regional Development, Building and Housing of Ukraine	21/09/2015
Ukraine State Service of Geodesy, Cartography and Cadastre	22/09/2015
State Enterprise "Information and Resource Center"	22/09/2015
NDI	23/09/2015
The Ministry of Infrastructure of Ukraine	23/09/2015
The Ministry of Finance of Ukraine	23/09/2015
The Ministry of Finance of Ukraine	09/10/2015
Parliament of Ukraine	13/10/2015
State statistical service of Ukraine	05/11/2015
The Ministry of Economic Development and Trade of Ukraine	19/11/2015

List of ODRA Events

Event	Description	Date
ODRA introductory meeting	<i>The discussion of the Open Data Readiness Assessment (ODRA) of Ukraine</i>	10/08/2015
ODRA team meeting	<i>The discussion of the Open Data Readiness Assessment (ODRA) of Ukraine</i>	11/08/2015
ODRA team meeting	<i>The discussion of the Open Data Readiness Assessment (ODRA) of Ukraine</i>	13/08/2015
ODRA team meeting	<i>The discussion of the Open Data Readiness Assessment (ODRA) of Ukraine</i>	14/08/2015
ODRA team meeting	<i>The discussion of the Open Data Readiness Assessment (ODRA) of Ukraine</i>	18/09/2015

Presentation of Preliminary Findings of the Open Data Readiness Assessment Ukraine	<i>The roundtable discussion of interim results of the Open Data Readiness Assessment (ODRA) of Ukraine was held by the State Agency for e-Governance and UNDP in Ukraine.</i>	24/09/2015
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List of Organizations Involved in Interviews

#	Organization
1	NGO Scientific and research Centre for Legal Informatics
2	Spilno TV
3	Council of Europe
4	Association of IT Enterprises
5	National Academy of Public Administration
6	NGO OPORA
7	NGO E-Democracy
8	NGO Podillya Agency for Regional Development
9	NGO Social Boost
10	NGO CHESNO
11	NGO Centre UA
12	NGO Dostup do pravdy
13	NGO Anti Corruption Action Centre
14	NGO Innovation Kyiv Mohyla Academy
15	Microsoft Ukraine
16	Administration of www.zloch.in.ua
17	NGO Centre for Political Studies and Analysis
18	NGO Institute of Media Law
19	Kantseliarska sotnya - "Stationery Hundred" initiative
20	State Enterprise "Information and Resource Center"
21	State Archives - Construction Inspection of Ukraine
22	The Ministry of Regional Development, Building and Housing of Ukraine
23	State Service of Special Communication and Information Protection of Ukraine
24	State Migration Service of Ukraine

25	State Agency for E-Governance of Ukraine
26	The Ministry of Economic Development and Trade of Ukraine
27	The Ministry of Infrastructure of Ukraine
28	The Ministry of Justice of Ukraine
29	Secretary of Cabinet of Minister of Ukraine
30	Ukraine State Service of Geodesy, Cartography and Cadastre
31	The Ministry of Finance of Ukraine
32	Parliament of Ukraine
33	State statistical service of Ukraine
34	International Renaissance Foundation
35	NDI

C. Availability of key Datasets

The identification and prioritisation on what datasets to publish first, will be different from country to country. The following table lists key datasets that have shown to be of priority in some Open Data initiatives.

It should be noted that the new Open Data Regulation in Ukraine contains a list of more than 300 datasets that are identified as data that will have to be published as Open Data via this regulation. The Open Data Regulation also states that this list of datasets must be updated on a regular basis following consultations, feedback on data quality and demand for additional datasets, thus the list of datasets of the Open Data Regulation will become a living document and the primary resource both for the availability and the demand of Open Data in Ukraine. This will allow for supply-demand gap analysis and should inform future data collection and publication.

Within the scope of this ODRA it was not feasible to assess the extended list of 300 datasets in detail. For practicability the ODRA focussed in those datasets where there was clear evidence that these **high-potential datasets** show a great intersection of being:

1. available inside government in digital, well structured formats
2. available as high-quality primary (not aggregated) data, including: structured, detailed, granular, fresh, regularly updated, with quality metadata, descriptions, etc
3. useful for reusers, e.g. with high demand for
4. release is relatively easy and can be done with reasonable resources (time, money)
5. no restrictions for release, including:
 - a. no personal data included or data is anonymized in a way that safeguards personal information
 - b. no conflicts with state secrecy, or military sensitive information
 - c. no intellectual property rights attached that could be violated by publication

Marked as **bold** are those datasets that have been identified as **high-potential datasets**.

The Ministry of Finance of Ukraine	Datasets to be opened up via Open Data Regulation: <ol style="list-style-type: none">1. List of business entities that are licensed to issue and hold the lotteries2. Information, which is published in accordance with the Law of Ukraine "On Open Use of Public Funds"3. Register of local borrowings and local guarantees
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		<p>4. Information on state guarantees 5. Regulations (standards) of accounting records 6. Forms of financial statements</p>		
Dataset	Availability of the data Digital Structured format Quality	Feasibility to open it Policy Technical Institutional	Key benefits, risks and barriers	Recommendations
Budget data (both at Ministry of Finance and individual agency level)	<p>Data is digital, and available as structured data in Oracle databases (SQL).</p> <p>The MoF operates several databases and is currently working on a comprehensive inventory of all data holdings.</p> <p>Available data includes: information on the budget process, formation, distribution and use of public funds managers and recipients of the State Budget of Ukraine, the Autonomous Republic of Crimea and local budgets and the Pension Fund, enterprises and funds of obligatory state social insurance.</p> <p>Quality: Budget data of the MoF is available in high-quality, itemized and non-aggregated.</p>	<p>Policy: Budget data and other datasets of the Ministry must be made available as Open Data via Open Data Regulation.</p> <p>The MoF shows support for Open Data and has established understanding and expertise.</p> <p>Technical: Data can be exported from SQL databases to various formats for publication as Open Data. The Ministry has started to publish budget data on its website.</p> <p>Institutional: Other Ministries and government bodies must report their budget data to the MoF, the quality of these datasets might differ.</p> <p>Human and financial resources are needed for the integration of database systems and standardisation.</p>	<p>Benefits: There is expressed high demand for the datasets of the Ministry from other Government bodies, CSOs and Media. Main focus is on using this data to better budget allocation and to mitigate corruption.</p>	<p>Standardisation and integration of databases: There is a need to improve the interoperability of the different databases of the Ministry to ease exchange and comparability.</p> <p>All data should be published as Open Data according to the Open Data Regulation.</p>
Disaggregated expenditure and grant data (e.g. which school got what money, when)	Data is digital, and available as structured data in Oracle databases (SQL).	Policy: Spending data must be made available as Open Data via Open Data Regulation.	Benefits: There is expressed high demand for the datasets of the Ministry from other Government bodies, CSOs and	All data should be published as Open Data according to the Open Data Regulation.

	<p>High-potential datasets include: Treasury transactions; agreements (state-owned enterprises, social insurance) and execution of the budget; data on budget programs and the flow of their funds.</p> <p>Quality: Spending data is available in high-quality, itemized and non-aggregated.</p>	<p>The Ministry shows support for Open Data and has established understanding and expertise.</p> <p>Technical: Data can be exported from SQL databases to various formats for publication as Open Data.</p> <p>Since September 2015 the Ministry of Finance has started publishing spending data (use public funds) on a new web portal spending.gov.ua. in accordance with the Law "On the open use of public funds."</p>	<p>Media. Main focus is on using this data to mitigate corruption.</p> <p>Data available via spending.gov.ua. is free of charge with no restrictions for reuse.</p>	<p>Regular consultation with reusers of the data should be conducted to understand if the data made available meets the needs from the demand side (specially in regards to quality: structured, detailed, granular, fresh, regularly updated, with quality metadata, descriptions).</p> <p>All data should be published as Open Data according to the Open Data Regulation.</p>
State Statistical Service of Ukraine		<p>Datasets to be opened up via Open Data Regulation:</p> <ol style="list-style-type: none"> 1. Guide on sections of statistical information 2. Descriptions of the state statistical observations 3. Standard reports on quality 4. Results of statistical observations (statistical information) 5. Information on wood harvesting and processing 		
Dataset	Availability of the data	Feasibility to open it	Key benefits, risks and barriers	Recommendations
Statistical data (from the Statistical Agency or individual departments publishing recognized national statistics)	<p>Digital</p> <p>Structured format</p> <p>Quality</p>	<p>Policy</p> <p>Technical</p> <p>Institutional</p>	<p>Benefits: There is expressed high demand for statistical information (about economic, social, demographic, ecological phenomena and processes) collected according to the plan for the relevant year in Ukraine and</p>	<p>The State Statistical Service will require additional human and financial resources in order to make all its data available as Open Data on a new platform.</p> <p>The practice of charging for data must be reviewed and most likely replaced by</p>

	<p>machines, such as: .pdf, .doc, .html. Only some data are publicly available in .xls format.</p> <p>Datasets available via www.ukrstat.gov.ua include: Demographic and social statistics; Economic statistics; Income and living conditions; Culture; Human settlements and housing; Population and migration; Education; Health; Justice and crime; Labor market; Social Protection; Public finance, taxes and public sector; Economic activity; Foreign trade; Science, technology and innovation; Macroeconomic statistics; National Accounts; Prices; etc.</p> <p>Data are aggregated for Ukraine as a whole and by region, by economic activity, monthly, quarterly, annual, etc.</p> <p>Data are updated monthly, quarterly, annually and made available via official site.</p>	<p>accordance with the Plan of State Statistical Observations and posted on the official website of the State Statistics Service.</p> <p>Technical: As most data are available in structured formats inside the State Statistical Service it should be feasible to export it into formats that can be processed by machines.</p> <p>All Information posted on the official website of the State Statistics in the public domain.</p> <p>Institutional: The State Statistical Service has not yet shown leadership on Open Data.</p> <p>The production and maintenance of the data is financed via state budget as well as its distribution or dissemination.</p> <p>As publication of data is now mandatory via Open Data Regulation the State Statistics Service might need additional financial and human resources.</p>	<p>regions.</p> <p>The State Statistics Services has established policies and processes to safeguard the protection of personal data.</p> <p>Risks/barriers: Most statistical data needs to be exported or transformed to structured formats.</p> <p>The official site www.ukrstat.gov.ua is technically outdated and filled only manually. It does not allow for automated updates from a database via API.</p> <p>The State Statistical Service has established its own scheme for charging for "value added" reports and analysis. This represents a barrier against not making high-quality data available free of charge as it might undermine the old business model.</p>	<p>a free of charge for all data paradigm.</p>
Census data	Census data are digital, and available as structured data inside the State Statistical Service. Historical data are available for more than 20 years.	Technical: Census data are available in structured formats inside the State Statistical Service it should be feasible to export it into formats that can be processed by machines.	Benefits: There is expressed demand for census data. All census data collected according to the plan for the relevant year in Ukraine and	The State Statistical Service will require additional human and financial resources in order to make census data available as Open Data on a new platform.

	<p>However data publicly available via www.ukrcensus.gov.ua is only accessible via the web frontend based PX-Web statistics databases technology. This means users can navigate via the webinterface. However usability and thus access is very limited, and data are not available in structured formats for download.</p> <p>Data are aggregated for Ukraine as a whole and by region.</p>		<p>regions.</p> <p>The State Statistics Services has established policies and processes to safeguard the protection of personal data in the census.</p> <p>All information posted on the official website is in the public domain and available free of charge.</p> <p>Risks/barriers: Census data available as structured data inside the State Statistical Service might contain personal information, thus it must be ensured that protection of personal data is safeguarded by applying adequate anonymisation methods.</p>	
Parliament Administration		<p>Datasets to be opened up via Open Data Regulation:</p> <ol style="list-style-type: none"> 1. Legal framework of Ukraine (Database "Legislation of Ukraine") 2. Information on consideration of the agenda of the Parliament 3. Information on the bills registered in Parliament of Ukraine 		
Datasets	Availability of the data Digital Structured format Quality	Feasibility to open it Policy Technical Institutional	Key benefits and risks, and barriers	Recommendations
Parliamentary data including records of proceedings, draft laws under debate and enacted version of	Data is digital, and available inside as structured data in databases (SQL) of the Parliament of Ukraine. Historical	Policy: Specific policies or regulations govern the collection, maintenance and dissemination of the data in accordance	Benefits: High demand for legislative data from CSOs to improve transparency, and	All data should be published as open data following the Open Data Regulation.

legislation	<p>data are available since the second convocation of parliament 1994.</p> <p>The Parliament of Ukraine (Verkhovna Rada) holds several datasets including: Legislation of Ukraine; Information on the results of the consideration of issues on the agenda of the plenary session of the Parliament of Ukraine (by: People's Deputy faction, the coalition, etc.); Information on the bills registered in the Parliament of Ukraine.</p> <p>Datasets of parliament are available in digital and reusable formats (.csv, .xml, .json) using XSD, JSON Schema. Data are collected and maintained in automated systems and databases (SQL).</p> <p>The quality and detailedness of the data appears to be adequate. The data are updated once a month.</p>	<p>with the Law of Ukraine "On Access to Public Information". The Open Data Regulation mandates that certain datasets must be published as open data.</p> <p>Technical: Information is mostly published in .html, .pdf and .doc formats on the Parliament website www.rada.gov.ua free of charge.</p> <p>Structured data that is available inside databases can be exported to formats that can be processed by machines.</p>	<p>hold the government to account. Several watchdog organisations scrape the parliamentary website and documents to get structured data.</p> <p>Risks/barriers: Data only available in non-structured formats that can not be processed by machines automatically.</p>	
The Ministry of Infrastructure of Ukraine		<p>Datasets to be opened up via Open Data Regulation:</p> <ol style="list-style-type: none"> 1. Database of the Shipping Register of Ukraine 2. List of the postal codes and post offices of Ukraine 3. The State Civil Aircraft Register 4. Information on the rate of traffic accidents in Ukraine 5. Information on issued and canceled licenses and certificates for vehicles <ol style="list-style-type: none"> 1. Reports on transportation of dangerous goods by air, railway and ship transport 2. Information on reimbursement of costs from the state budget for the enterprises of the industry for provided transportation services at low rates. 3. Information on the status of consideration of the cases related to the penalty recovery from the airlines that have violated airspace. 		

	<ol style="list-style-type: none"> 4. Information on consumption of energy resources by private joint stock companies in the sphere of railway transport. 5. Information on scheduled consumption and saving of gas by private joint stock companies in the sphere of railway transport. 6. About volumes of transportation of steam coal to power plants 7. Information on the number of bus routes within regions, number of passengers and cargoes 8. Information on volumes of carried out transportations at low rates by motor and electric transport 9. Information on contacts of the enterprises under management of the Ministry of infrastructure 10. Database of the lease agreements of the state movable property. 11. Register of boats of the small fleet 12. Register of ship entries 13. Port statistics concerning cargo transshipment in view of terminals and berths 14. Plan of repair and capital dredging works and their progress status 15. Information on collected port duties by type of duties and separately for each port 16. Data base of freight traffic: cargo turnover, volume, revenue from railways freight traffic in view of counterparties (shipper, freight owner, forwarder) 17. Information on the shipped, accepted cargos by stations 18. Register of the existing cars by types, number of car requests by stations 19. Information on scope of car repairs in units and UAH 20. Information on empty running of cars 21. Data on rolling stock: working, nonworking fleet, structure in terms of ownership, types of cars, location 22. Data on track facilities (length, repaired, need to be repaired) 23. Data on locomotives (number, working, nonworking fleet) 24. Passenger flow on internal and international routes 25. Passenger flow on regular intercity routes 26. Information on international transfers 27. List of post offices 28. Information on spots of car accidents concentration on the general-purpose highways 29. Information on progress status of potholes liquidation on the main international, state and regional roads 30. Information about financing of the road industry as of the current date 31. Information on passenger flow in view of airports and air carriers 32. Statistic data concerning regularity of flights and accidents 33. Register of the certified entities providing services of the aircraft ground handling
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		34. Register of the air carrier's designated for operation of international airlines		
Datasets	Availability of the data	Feasibility to open it	Key benefits, risks and barriers	Recommendations
Transport data including roads and public transport	<p>Digital Structured format Quality</p> <p>Data that is available in digital, structured data in either .xsl or databases (SQL) include:</p> <p>Procurement DB (Rail cargo handling DB, Rail passenger transfer DB, Leases and property DB, Sales DB.)</p> <p>Procurement DB data collected and maintained by SOE in paper form, then transferred into spreadsheets.</p> <p>Rail cargo handling DB; Rail passenger transfer DB;</p> <p>Leases and property DB collected and maintained by SOE in paper form, then transferred into spreadsheets;</p> <p>Sales DB collected and maintained in various accounting software.</p> <p>Most data are available in .xls formats. The data are updated on a daily or monthly basis.</p> <p>The quality of Procurement DB is low, Rail cargo handling DB is high,</p>	<p>Policy Technical Institutional</p> <p>Policy: The Ministry of Infrastructure of Ukraine holds a lot of datasets that must be published as Open Data following the Open Data Regulation.</p> <p>Technical: Some of the data is collected paperbased and is then transferred to spreadsheets (.xsl)</p> <p>Institutional: According to the Ministry it will have issues publishing the following datasets as Open Data as the data is particullary collected third parties like SOEs:</p> <p>Information on consumption of energy resources by private joint stock companies in the sphere of railway transport;</p> <p>Information on the number of bus routes within regions, number of passengers and;</p> <p>Port statistics concerning cargo transshipment in view of terminals and berths;</p> <p>Data base of freight traffic: cargo</p>	<p>Benefits: Expressed demand for transport data from private sector.</p> <p>Risks/barriers: there is little IT experience and no specific experience on data management. Human and financial ressources needed to improve data management and flow between Ministry and SOEs.</p> <p>Some SOEs might be not in favor making data available as Open Data for variouse reasons including: poor data quality, some of the datasets might contain classified information (national security) such as ports, airports, bridges, etc.</p> <p>The costs for thew production and maintenance as well as distribution and dissemination of some datasets are funded via the budgets of SOEs.</p>	<p>Data management and data sharing between Ministry and SOEs must be improved, which will require funding.</p> <p>Data that exists inside the Ministry as structured data can be published as Open Data following the Open Data Regulation. Datasets that contain personal data must be anonymised to safeguard privacy protection.</p>

	<p>Rail passenger transfer DB is high, Leases and property DB is low/medium, Sales DB is medium.</p> <p>Historical data are available only three years.</p> <p>The Ministry has started to publish some data on the official website. All data available free of charge, with no restrictions for reuse.</p>	<p>turnover, volume, revenue from railways freight traffic in view of counterparties (shipper, freight owner, forwarder);</p> <p>Register of the existing cars by types, number of car requests by stations;</p> <p>Statistic data concerning regularity of flights and accidents;</p> <p>Register of the air carrier's designated for operation of international airlines.</p>		
The Ministry of Economic Development and Trade of Ukraine		<p>Datasets to be opened up via Open Data Regulation:</p> <ol style="list-style-type: none"> 1. Register of Administrative Services of Ukraine 2. Information on procurements that is published in accordance with the Law of Ukraine "On public procurement" 3. Information about the use of special sanctions stipulated by the Law of Ukraine "On Foreign Economic Activity" 4. Information on the use of export and import quotas 		
Datasets	Availability of the data Digital Structured format Quality	Feasibility to open it Policy Technical Institutional	Key benefits, risks and barriers	Recommendations
Procurement data (who was awarded what) and contract data (the documents and details of the deal)	<p>Most data are available in the next unstructured formats that can not be processed by machines: .txt, .doc, .pdf, .html, and scanned images.</p> <p>Some data are available in structured formats (mostly .xls) or databases (SQL) including:</p> <ul style="list-style-type: none"> - Registry of Administrative Services of Ukraine; 	<p>Policy: The Ministry of Economic Development is working accordance laws or regulations governing the collection, storage and dissemination of data:</p> <p>The Law of Ukraine "On Administrative Services"; The Law of Ukraine "On public procurement"; The Law of Ukraine "On Foreign Economic Activity"; The Law of Ukraine "On information"; The Law of</p>	<p>Benefits: There is expressed high demand from CSOs and Media but also from private companies to access the data to as Open Data for analysis of the procurement process, to identify missues and fight corruption.</p> <p>Risks/barriers: Most data that must be published as Open</p>	<p>The government itself has a huge interest to make the procurement process more transparent and efficient to save tax money by reducing corruption and missues. Making procurement data available as Open Data and the implementation of the Open Contracting Standard alignnes very well with the reform process (specially the implementation of the reform is to build a modern, effective</p>

	<ul style="list-style-type: none"> - Information on the use of export and import quotas; - Database for clarification of public procurement; - Information about the use of special sanctions; <p>Databases are updated constantly or on monthly basis.</p> <p>The structure and quality of these data complies with the requirements of legislation on administrative services, government procurement and foreign trade.</p> <p>Historical data are available until they are important and they have a need.</p>	<p>Ukraine "On Access to Public Information"; Minister's decree № 830 on 19.07.2012 "On approval of the establishment, implementation, maintenance, technical support, accounting electronic information resources of the Ministry of Economic Development and Trade of Ukraine and access to employees of the Ministry"</p> <p>Technical: The data published on the official website of the Ministry is free of charge.</p> <p>Procurement data is published on the civil society eProcurement initiative, called ProZorro, at www.prozorro.org</p> <p>Institutional: Collecting, maintaining and updating of information and data is carried by the structural divisions of the Ministry.</p> <p>Publication of data on the official website and technical support are doing employees of the IT department of the Ministry within their duties.</p>	<p>Data following the Open Data regulation is owned and managed by the ministry with the following exception:</p> <ul style="list-style-type: none"> - State Register of measuring instruments; and - Register of public primary and secondary standards of measurement units. <p>There are no financial and human resources for advanced preparation and maintenance of the databases.</p> <p>and transparent public procurement system in Ukraine).</p> <p>Data that exists inside the Ministry as structured data can be published as Open Data following the Open Data Regulation. Datasets that contain personal data must be anonymised to safeguard privacy protection.</p>
Ukraine State Service of Geodesy, Cartography and Cadastre		<p>Datasets to be opened up via Open Data Regulation:</p> <ol style="list-style-type: none"> 1. List of agricultural lands of the state property, title to which is planned to sell at the land sales 2. Register of the apparatus of satellite radio navigation systems 3. The state register of the certified surveying engineers 4. The state register of the certified geodetic surveyors 5. Guide on normative monetary value of agricultural land in Ukraine 6. Guide on normative monetary value of the lands of inhabited areas 7. The state register of the experts on the estimation of the monetary value of lands 	

		8. The state fund of the land management documentation 9. Information on the disposal of agricultural lands of the state property		
Datasets	Availability of the data	Feasibility to open it	Key benefits, risks and barriers	Recommendations
Geospatial information - maps, address registers, points of interest.-	<p>Historical data is only available paper based. Data is collected and managed via a shared interconnected system in a central database.</p> <p>Data is available inside the Ministry digital and in various formats including common GIS file formats, vector and raster graphics, TIFF, JPEG, etc. Metadata is available in XML. There is a GIS browser available at map.land.gov.ua but without any download functionality.</p> <p>On the Ministries website land.gov.ua some data are available in reports (Performance Report 2014 - budget program "State land reform", Performance Report 2014 of budget programs "Management in land resources") in .doc, .pdf formats (Reports on financial results in the regions) and in HTML tables (The average rental price agricultural land in Ukraine by Region).</p> <p>The national map and orthophotos are not available for download via</p>	<p>Feasibility to open it</p> <p>Policy Technical Institutional</p> <p>Policy: Several datasets must be published following the Open Data Regulation.</p> <p>Technical: Cadastral data and the national map exist inside the Ministry in digital structured formats and could be made available as Open Data following the Open Data Regulation with relatively little efforts in theory.</p> <p>Institutional: The main constraints of the Ministry are limited financial and human resources to keep the data updated.</p>	<p>Key benefits, risks and barriers</p> <p>Benefit: There is high demand for cadastral data, the maps and the orthophotos both from other Government agencies and private sector, CSOs and the media.</p> <p>Risks/barriers: The main constraints of the Ministry are limited financial and human resources to keep the data updated. Some data on critical infrastructure can not be published because of national security reasons.</p> <p>Under the Open Data Regulation the Cadastral data published will also include the names of owners of land and property.</p>	<p>Data that exists inside the Ministry as structured data can be published as Open Data following the Open Data Regulation. Datasets that contain personal data must be anonymised to safeguard privacy protection.</p> <p>However given the huge amount of data a strategy for making this data available. The Ministry needs to be properly resourced to keep its data updated and published to the central portal.</p>

	the website at all although available inside the Ministry in high-quality (up to 1:1000 map and (up to 1:2000 for orthophotos).			
The Ministry of Regional Development, Building and Housing of Ukraine		Datasets to be opened up via Open Data Regulation: <ul style="list-style-type: none"> 1. Register of cooperation agreements of territorial communities 2. List of expert organizations eligible for examining construction projects 3. The state and industrial building standards 4. List of basic organizations carrying out scientific and technological activities in construction 5. List of national standards, voluntary application of which proves that a product meets requirements of the technical regulations of construction products, buildings and structures 6. List of the Technical certificates proving fitness for use of construction products 7. Database of Internally Displaced People 		
Dataset	Availability of the data Digital Structured format Quality	Feasibility to open it Policy Technical Institutional	Key benefits, risks and barriers	Recommendations
Construction data (standards, permits, certificates, zoning)	The Ministry does not hold a lot of data, mainly lists, available in XML formats inside the Ministry. However publicly available via the websites are only some data inside inside reports in PDF formats and HTML tables.	Policy: Several datasets must be published following the Open Data Regulation. There are no technical or institutional constraints making the data available as Open Data.	Benefits: Some Government authorities and private companies have demand for the data. Risks/barriers: The Database of Internally Displaced People is available inside the Ministry as SQLite but can not be published without anonymisation as it contains personal information.	Data that exists inside the Ministry as structured data can be published as Open Data following the Open Data Regulation. Datasets that contain personal data must be anonymised to safeguard privacy protection.
The Ministry of Justice of Ukraine		Datasets to be opened up via Open Data Regulation: <ul style="list-style-type: none"> 1. Unified state register of legal entities and individual entrepreneurs 2. Register of public associations 3. Unified register of public organizations 		

			<ol style="list-style-type: none"> 4. Unified register of notaries 5. State register of certified court experts 6. Unified license register 7. Register of permitting documents 8. Unified register of special forms of notarial documents 9. Notification of bids for the sale of confiscated and seized property and their results, notification of property for free transfer 10. List of specialized organizations engaged in sale of property 11. State register of print media and information agencies as subjects of information activity 12. Register of methodologies for forensic examination 13. Unified state register of persons, who have committed corruption offences 14. Unified register of enterprises for which have been initiated the judicial proceedings in bankruptcy 15. Unified register of arbitration managers (asset managers, financial rehabilitation managers, and liquidators) of Ukraine 16. State register of potentially dangerous objects 17. Unified state register of regulatory acts 18. Electronic register of entities providing services related to electronic digital signature 	
Dataset	Availability of the data	Feasibility to open it	Key benefits, risks and barriers	Recommendations
Company register, and other registers Real estate data (sales, listings, taxes, other property-specific data)	<p>Digital Structured format Quality</p> <p>The Ministry of Justice holds a number of very important databases including the country's key registers.</p> <p>Most databases are relational (tables) and contain scanned documents are stored in TIFF format. Data exchange formats are DBF and XML.</p> <p>The quality of the datasets is high and disaggregated. Classifiers from</p>	<p>Policy Technical Institutional</p> <p>Policy: Several datasets must be published following the Open Data Regulation.</p> <p>There are no policy conflicts (such as state secrecy, military sensitive information, or intellectual property rights) that could prevent from publication as Open Data.</p> <p>There are no legal issues with the protection of personal data as the new</p>	<p>Benefit: There is high demand for the datasets from national and local authorities, CSOs, courts, prosecutors, centers of administrative services, credit bureau, and individual citizens.</p> <p>Making these registers available as Open Data is inline with the Government's reform agenda and policy</p>	<p>Data that exists inside the Ministry as structured data can be published as Open Data following the Open Data Regulation.</p> <p>The process of making these database interoperability requires significant attention and resources. Specific datasets require unification.</p>

	<p>State Statistical Service of Ukraine are used.</p> <p>Historical data is available from 2004 onwards.</p>	<p>legislation mandates for the publication of owners and beneficial ownership.</p> <p>Technical: Most databases use different technical standards and formats which presents issues for interoperability. Some databases have high volume so that making them fully available online might present technical difficulties.</p> <p>Institutional: An ongoing reconstruction process will merge two State Owned Enterprises into one, called “National Information Systems”, which will be responsible for the technical administration of 21 databases (including Unified state register of legal entities and individual entrepreneurs; Register of ownership rights to the property; Register of civil status).</p>	<p>priorities to fight corruption.</p> <p>Risks: The Ministry is in full support of Open Data and does only see benefits but no risks in making the data available.</p>	
Other datasets not analysed as part of this assessment				
Data on public facilities including schools, hospitals, police stations, public toilets, libraries, government offices etc. - location and services available				
Public service delivery and performance data at the level of individual school, hospital/clinic etc.				
Crime data to the level of individual crimes and their locations				

Reports of inspections and official decisions and rulings in reusable form (e.g. public health inspections of food outlets)				
Weather data				
Pollution levels, energy consumption				
Global Development: Aid, food security, extractives, land				
Science and Research Genome data, research and educational activity, experiment results				
International trade data. Details of the import and export of specific commodities and/or balance of trade data against other countries.				

D. Action Planning

For a successful Open Data program actions need to be taken at different levels simultaneously and in coordination with each other. Tim Berners-Lee, initiator of the UK Open Data Institute summarizes it as 'Open Data starts from the top down, from the middle out and from the bottom up'.

- The top level in this context is the legal framework and the overall Government policy framework. It is where the overall circumstances for enabling Open Data are set and decided.
- The middle level is formed by the sectoral Ministries and Agencies and the data sets they hold. It is where the translation into everyday processes and practical interpretation takes place.
- The bottom up level is where the first pilots projects for publishing and using Open Data take place as a collaborative exploration of both Government Agencies civil society and business stakeholders.

Small pilots where Government data holders and external stakeholders together explore how to do Open Data well, are key bottom-up initiatives to show where actions need to be taken inside Agencies or on a regulatory level. Likewise changes in regulation that are important will allow new bottom-up initiatives to emerge. Sectoral Ministries and Agencies by adopting specific steps give practical interpretation of existing legal and policy framework and create the space for external stakeholders to make an impact with Open Data. Implementing an Open Data initiative is very much a 'learning-by-doing' process, and it is therefore a key that actions are not planned or viewed as isolated items, but always in the context of corresponding or interconnected steps at the other levels.

Open Data Working Group with a key role

The newly formed Open Data Working Group (ODWG) at the Cabinet of Ministers is a crucial element in the implementation of the Open Data Initiative in Ukraine. It is highly recommended to review the composition of the ODWG to ensure it includes representatives from all stakeholder groups, including Government, civil society, private sector, and academia. Due to its high level and inter-ministerial composition, as well as the presence of external business and CSO stakeholders, the ODWG can become the connecting element between the three different levels and various activities. The ODWG is uniquely positioned to a) suggest alterations to existing legal and policy frameworks, b) provide guidance to Ministries and Agencies both on the practicalities of Open Data as well as the interpretation of legal and policy frameworks, thus ensuring consistency across Government, and c) provide recognition to ongoing pilot projects and use their experiences to inform a) and b) in an iterative process. This makes the ODEG the owner and moderator of the National Open Data Action Plan (NODAP).

National Open Data Action Plan (NODAP)

The ODRA report provides recommendations for specific actions to address challenges and opportunities identified across the eight dimensions of the Open Data Readiness Assessment. The recommendations might be used as a starting point to develop the National Open Data Action Plan (NODAP) for the implementation of the Open Data Regulation¹⁴⁷. The NODAP should be developed by the Open Data Working Group (ODWG) lead by its Steering Committee (SC). The NODAP should define specific actions, that:

- address key challenges in the different dimensions presented in this assessment
- are relevant to the Ukraine's main development goals
- are Specific, Measurable, Actionable, Relevant and Timebound (S.M.A.R.T.)

¹⁴⁷ Resolution of the Cabinet of Ministers of Ukraine (2015). On approval of the datasets to be published in the form of open data, assessed on October 25th, 2015 from: <http://www.kmu.gov.ua/control/uk/cardnpd?docid=248573101>

- give indication of a responsible action owner

As the reform agenda in Ukraine moves at a fast pace the recommended actions of this report will be clustered in five categories in regards to the timeframe for their implementation:

- immediate (now, starting to count by the date of the publication of this report)
- short term (within the next 6 month)
- medium term (from 6th month to 12th month)
- long term (from 12th month to 36th month)
- continuous (activities that require long term continuous action)

The NODAP should be understood as a living document that needs to be continually updated in a collaborative and iterative process driven by the multi-stakeholder Open Data Working Group. The action plan is designed to strike a balance between actions at the top, middle and bottom. To be operational the ODRA report provides two types of recommended actions:

1. a set of comprehensive recommended actions addressing the challenges and opportunities identified in each dimension (see the tables at the end of each dimension).
2. a set of high priority actions for the initial phase of the implementation of the Open Data Initiative (marked in bold in the tables of each dimension).

The high priority actions focus on releasing a few data sets as Open Data as soon as possible, in the context of the possible pilot projects and likely in line with information already published pro-actively online. This is the clearest possible signal to society that they are invited to engage. Specific action plans for each pilot project might be developed using this [Open Data Pilot Project Template](#).

High Priority Actions

Ref	Action	Responsibility	Timescale	Comments
A1.01	Operationalise the Open Data Working Group	Open Data Working Group, Cabinet of Ministers	Immediate	The Open Data Working Group (ODWG) is formalised with mandate, however it must be operationalised by giving itself a clear structure. A Governance model should be established and transparently published. The WG might nominate a “Steering Committee” (SC) as a small and agile task force. Many members of the ODWG will not have the time to be involved in all activities, so the SC should be responsible for drafting the action plan and planning coordinating activities. The SC must regularly inform the other members of the ODWG. Decisions must be taken by the whole WG not the SC.
A1.02	Sensitisation activities in public sector	Open Data Working Group, Cabinet of Ministers	Short to medium term	Findings of this assessment indicate that there is little knowledge about the concepts of OGD among civil servants, thus a sensitisation program must be established and implemented across Government to scale and deepen the understanding. This sensitisation program should not only explain the concepts of Open Data but also entail a section on the benefits of Open Data as a set of arguments “why” the

				Government should open up its data and "how" this is useful for the Government itself, for citizens, and for other stakeholders.
A1.03	Improve OGP commitments and deepen OGP process	Open Data Working Group, Cabinet of Ministers	Immediate	Ukraine Government should consider to commit to more ambitious Goals related to OGD, transparency, accountability and citizen engagement in its current OGP National Action Plan (NAP). Commitments in the NAP might include OGD specific commitments in the areas of Fiscal Transparency, Legislative Transparency, Access to Information and Anti-Corruption. In addition to the commitments in the NAP, the Government should also review the OGP process in Ukraine and take actions so that it is more inclusive and that civil society and other stakeholders are more effectively engaged in the process of formulating the NAP and monitor its implementation.
A1.04	Adopt the International Open Data Charter	Open Data Working Group, Cabinet of Ministers	Immediate	Ukraine can become an early adopter and champion by linking the activities of the development and implementation of the NODAP as commitments in adopting the Open Data Charter. This will give the Government's reform agenda the international visibility it deserves. In addition the Government should also sign the OGP Declaration on the Post-2015 Sustainable Development Goals to underpin its commitment.
A2.01	Ensure policies and practices safeguard the protection of privacy	Open Data Working Group, Cabinet of Ministers	Medium term	Review existing policies and practices and formulate specific actions (as a mandatory standard) to ensure the protection of privacy across Government. Key measure is to establish one responsible contact person for protection of privacy in each agency, with respective training and mandate. SWOT analysis at agency level and publication of best practice guidelines for anonymisation.
A2.02	Strengthen Access to Information practice	Open Data Working Group, Cabinet of Ministers, Ombudsman	Medium term	Ensure that the Right to Access to Information is implemented and followed consistently across Government. Reduce arbitrary practice and use of exceptions to limit or deny access to information. Improve the possibility to obtain right to access by strengthening the Ombudsman institution. These goals might be addressed by formulating specific actions including trainings for civil servants to conform with the new regulations; publication of guidelines for civil servants; publication of statistics on Access to Information requests and on the implementation of the new regulations; finally the Access to Information should be improved by enforcing the pro-active publication of data as determined in the list of mandatory datasets set by the Open Data Regulation.

A2.04	Draft National Open Data Action Plan (NODAP)	Open Data Working Group, Cabinet of Ministers	Short term	The SC of the ODWG should discuss and draft a first version of the NODAP for the implementation of the Open Data Regulation. The recommended actions of this report might be used as a starting point. The NODAP draft should then be widely disseminated for feedback by stakeholders and be discussed and agreed upon by the ODWG. The NODAP must contain very specific actions for the implementation using S.M.A.R.T. methodology. The implementation of the NODAP should be coordinated by the ODWG and the State Agency for E-Governance, including evaluation of progress, expectation management and public dissemination of results.
A2.05	Standard Open Data license and charging policies	Open Data Working Group, Cabinet of Ministers	Short term	Introduce a standard open license (such as Creative Commons CC-BY) as mandatory for all information and data across Government. Introduce a standard mandatory policy and practice for charging for Government information and data. Both are already defined in the Open Data Regulation and thus must be implemented consistently.
A3.01	Strengthen the State Agency for E-Governance as the coordinator for implementation	Cabinet of Ministers	Immediate	As recommended in A1.01 the process of the Open Data Regulation should be coordinated by the ODWG at the Cabinet of Ministers, this is where key Government officials and stakeholders discuss and recommend actions for the NODAP. The actual implementation of the NODAP, alongside with necessary measures like capacity development and technical support should be coordinated by the State Agency for E-Governance. To enable the agency to effectively do this job, it needs additional financial and human resources. Furthermore the role of the agency in this process should be defined more clearly to avoid confusion.
A3.02	Improve Data management capabilities	State Agency for E-Governance	Medium term & continuous	Establish a capacity development plan/curricula to improve data management capabilities across Government based on a gap assessment. Implementation of the capacity building program should be coordinated by the State Agency for E-Governance in cooperation with the National Academy of Public Administration. To scale across Government, this program should follow a “train-the-trainers” approach. Special programs on advanced statistics and data analytics are to be developed.
A3.03	Nomination of Open Data contact persons / CTO	Cabinet of Ministers	Immediate	Each Ministry and Government Agency must nominate a contact person for the coordination of the NODAP implementation (nomination of these officials by the government-data owners is also required according to the CMU Regulation #835). This contact points can liaise with the ODWG, become the multiplier and champion for Open Data in their organisation

				and also help coordinate other ICT issues such as standardisation across Government. A special training program for them is recommended.
A4.02	Establish a national Information Asset Register (IAR)	State Agency for E-Governance	Medium term	The Open Data Regulation should mandate for inventories of data assets at agency level that can be aggregated into a national Information Asset Register coherent view on data holdings at Government as-a-whole. This IAR should be made available via the national data portal. The IAR can play a vital part on the process of prioritising data publication and inform future data collection and publication. It is also a key element that helps citizens to make informed Access to Information requests. The IAR might be developed on basis of the initial list of priority datasets of the Open Data Regulation.
A4.03	Integration and standardisation of Management Information Systems (MIS)	State Agency for E-Governance	Medium to long term	The new Electronic Interaction System of Executive Bodies and the Unified State System of Electronic Document Exchange should be introduced across Government to overcome siloed ICT solutions and improve integration, standardisation, and data management and sharing across Government. Legacy systems might be updated or have to be replaced, civil servants trained to the new system, which makes this a long term activity that will require resources and time. It is important to ensure these new Systems are “Open Data ready”, e.g. are able to deal with structured data in formats that can be automatically processed by machines and have functionalities for exporting and publishing data as well as APIs.
A4.04	Improve public availability of high-quality data and leverage demand	State Agency for E-Governance	Short to medium term	The public availability of high-quality data via the central data portal will be improved through the Open Data Regulation. This will not only stimulate demand and reuse from civil society and private sector but should also be actively promoted to leverage demand and reuse of data within Government. This is an iterative process. Specific pilot projects for more efficient data use and analysis within Government might be developed. Sector where pilot projects can be easily developed include: Budget and spending data, parliamentary data, election data, main central registers, statistics, postcodes, national maps.
A5.01	Capacity building program to scale demand from civil society	Open Data Working Group, International Donors	Short to medium term	To scale the demand and capabilities in civil society to demand and reuse Open Data a dedicated capacity building program should be established. This should train members of CSO to advance their knowledge and technical skills in effective data analysis and data visualisation. A “train-the-trainers” approach is recommended to scale capacities. Donor activities in this field should be coordinated.

A5.03	Dissemination of results	Open Data Working Group	Short term	<p>It is recommended to set up a dedicated team that ensures that release of datasets as well as pilot projects and best practice is widely disseminated. For the Open Data Initiative to be successful it needs to create narratives and examples on how Open Data was actually useful for different stakeholders. Only these compelling examples and stories will inspire others help buy in and build momentum. This activity also includes updates on all activities of the Open Data Initiative and the Open Data lifecycle (from public availability, to reuse, to impact) is essential to raise public awareness.</p>
A5.04	Improve willingness to respond	Open Data Working Group	Medium term	<p>The NODAP should set clear parameters on how the implementation of the Open Data Regulation will improve the willingness to listen and respond to demand expressed for Open Data across Government. Demand expressed using a mechanism build into the central data portal can help make expressed demand and actual response to this demand in a transparent manner. This mechanism should provide incentives to actively respond to demand but also provide the opportunity to file a formal Access to Information request in case expressed demand was ignored. This process of demand and response and should be transparent on the central data platform.</p>
A6.01	Empower new intermediaries	Open Data Working Group, International Donors	Medium term	<p>A dedicated capacity building program should be established to build and deepen capacities in media organisations and independent journalists to become new intermediaries to engage in translation of Open Data into useful information of citizens and others. Such a program might entail basic courses as a part of the Journalistic curricula at University and modular courses for continuing education of professionals. Donor activities in this field should be coordinated.</p>
A6.02	Promote reuse via thematic co-creation events	Open Data Working Group, State Agency for E-Governance	Medium term	<p>Promoting Open Data reuse should be supported via a series of thematic apps development and co-creation events. These events show best results if they are not one-time-offs, but address a specific societal issue and are well prepared. Thematic data interventions (so called data squads) yield the best results and impacts.</p>
A6.03	Engagement on data prioritisation via consultations	Open Data Working Group, State Agency for E-Governance	Short term, continuous	<p>An initial consultation on Open Data has lead to the list of more than 300 datasets that has been published alongside with the Open Data Regulation. It is recommended to repeat public consultations on a regular basis to inform prioritisation and future data collection. It is important to actively approach different stakeholder groups into this process. The consultation and its results should be published</p>

				transparently on the central data platform.
A7.01	Secure funding for initial phase	Parliament of Ukraine, State Service for E-Governance	Immediate	Initial funding for the coordination of the ODWG and the development of the NODAP must be secured. This includes funding for coordination; initial basic capacity building; development of the pilot data portal into a official and operational data portal; supply of datasets into the central portal; support actions to help other Government organisations to publish data into the central portal, and other support actions including dissemination and organisation of public events and consultations. As a first step the State Agency for E-Governance should develop a realistic budget for the initial phase, the second phase, of the implementation of the Open Data Regulation.
A7.02	Secure funding for the implementation phase and capacity building	Parliament of Ukraine, State Service for E-Governance	Short term	A adequate funding must be allocated via a separate budget line in the state budget to secure sufficient funding is available to implement the Open Data Regulation across Government. It is important that the State Agency for E-Governance as the coordinator is sufficiently supported, but also that there is funding to support related activities in all participating Government organisations.
A8.03	Strengthen the ICT sector, entrepreneurship and innovations	State Service for E-Governance, Development partners	Long term	Dedicated programs to support entrepreneurship and innovations should be set up and coordinated with development partners.
A8.04	Supporting local developer community	ODWG, Development partners	Long term	Supporting the local developer community to engage with Open Data is key for the success and sustainability of the Open Data Initiative in Ukraine. Engaging the developer community should be coordinated by the Open Data Working Group and entail various activities including public events, apps competitions, co-creation events, and capacity building. Perhaps international programs like School of Data and/or Code for All could be models to establish a network of civic technologists across the country. These activities should be coordinated with and co-financed by development partners.
A8.05	Bridging the digital divide	State Service for E-Governance	Long term	Special programs to address and reduce the digital divide are recommended. Special focus programs on young women elderly people, communities in rural areas or marginalised groups should be implemented and coordinated with Development partners to create a more inclusive society and improve social mobility.