

Open Data in Alpine Space



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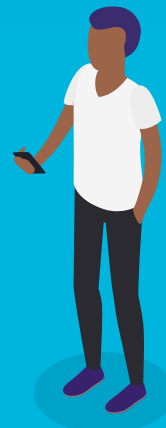




Data is just like crude.

-- Michael Palmer

- ▶ It's valuable, but if unrefined it cannot really be used.
- ▶ It has to be changed into gas, plastic, chemicals, etc. to create a valuable entity that drives profitable activity.
- ▶ Data must be broken down and analysed for it to have value!



Who are Stakeholders?



Civil society



Government



Private sector



Researchers



Journalists
and media



Donors and
investors



Multilateral
organizations

What is Shared and How?



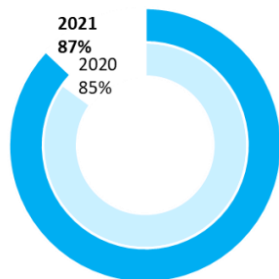
Open Data Maturity

- ▶ Initiator: European Commission
- ▶ **Annual Open Data Maturity report**
 - ▶ European Union member states
 - ▶ European Free Trade Association
- ▶ Main topics:
 - ▶ Open Data Policy
 - ▶ Open Data Impact
 - ▶ Open Data Portal
 - ▶ Open Data Quality

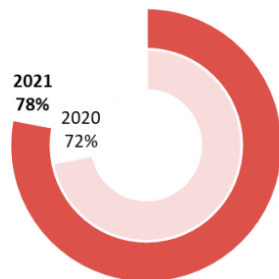
Dimension	Metrics
Open Data Policy	Policy framework
	Governance of open data
	Open data implementation
Open Data Impact	Strategic awareness
	Political impact
	Social impact
	Environmental impact
	Economic impact
Open Data Portal	Portal features
	Portal usage
	Data provision
	Portal sustainability
Open Data Quality	Currency
	Monitoring and measures
	DCAT-AP compliance
	Deployment quality and linked data

Open Data Maturity

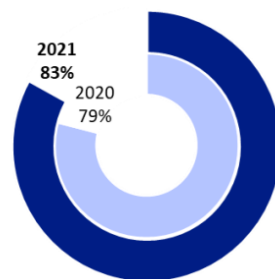
- ▶ average maturity level of the EU27 on each of the four dimensions
 - ▶ all dimensions show an improvement
 - ▶ the most mature dimension: Policy; the least mature dimension: Quality
 - ▶ the most improved dimension: Impact
 - ▶ several new national OD portals resulted in improved Portal dimension



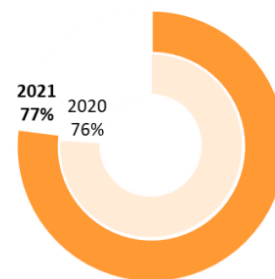
Policy



Impact



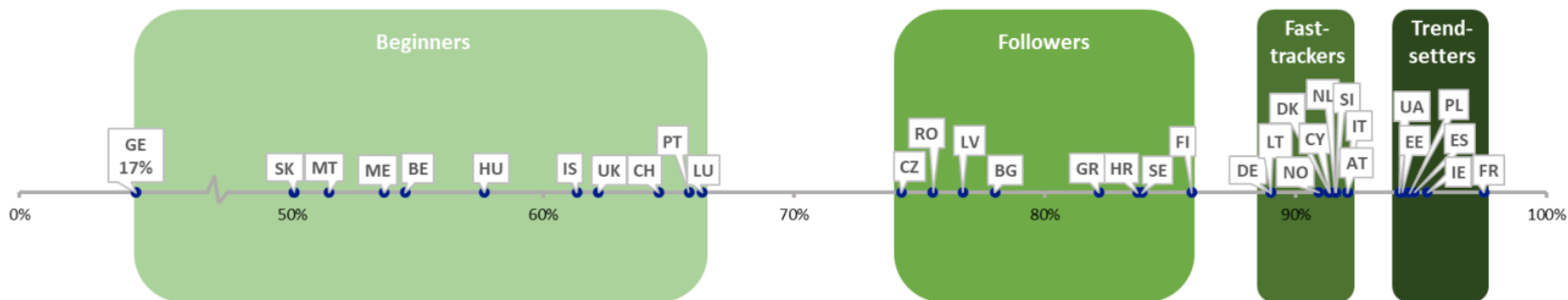
Portal



Quality

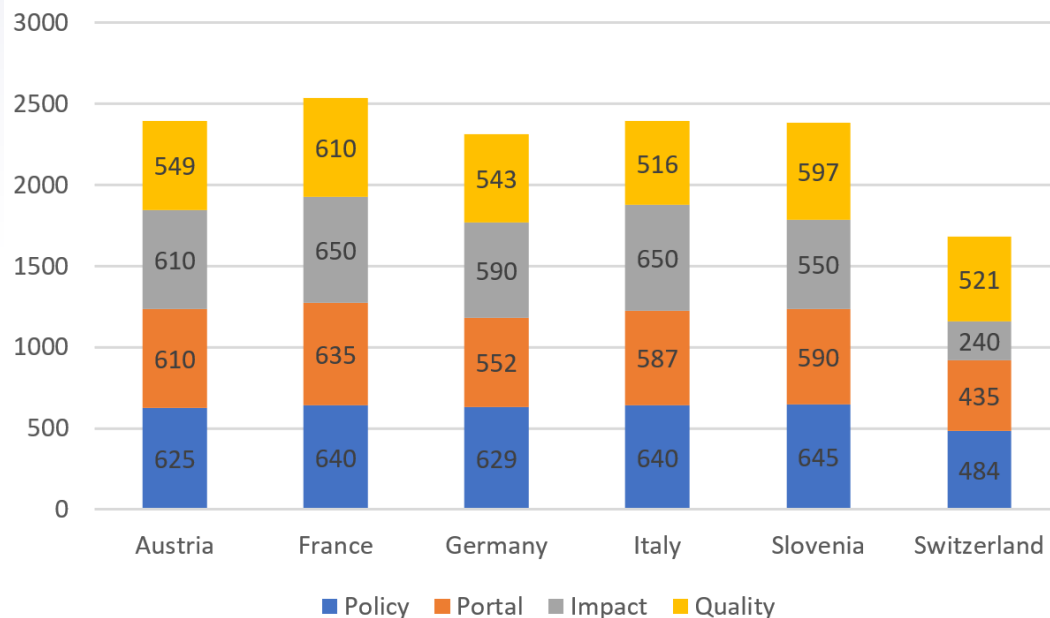
Open Data Maturity

- ▶ Open Data Maturity clusters: beginners, followers, fast-trackers, trend-setters
- ▶ Trend-setters: Estonia, France, Ireland, Poland, Spain, and Ukraine
- ▶ Fast-trackers: Austria, Germany, Italy, Slovenia
- ▶ Beginners: Switzerland, Liechtenstein



What is the Current Status?

- ▶ Maturity levels:
 - ▶ France 98%,
 - ▶ Slovenia 92%,
 - ▶ Italy 92%,
 - ▶ Austria 92%,
 - ▶ Germany 89%,
 - ▶ Switzerland 65%.
 - ▶ *Liechtenstein*



How to Define Recommendations?

CQBIT[®] 2019

QITIL[®]

International Organization for Standardization
ISO
27000

PMI
PMBOK V5

The
TOGAF[®]
Standard — Version 9.2

CMMI

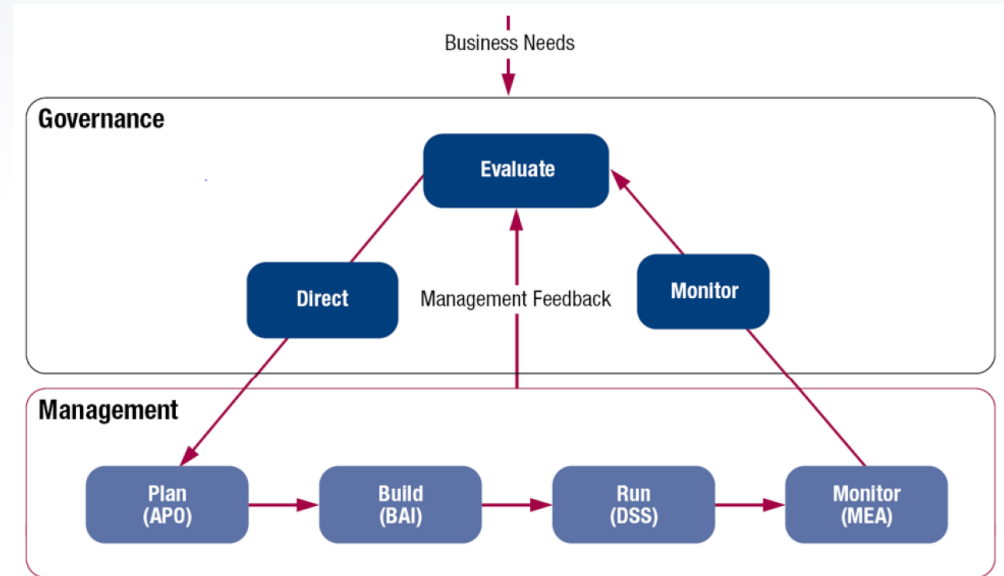


Alpine Space OD needs

OD Governance & Management

Governance on the strategic level

Management key areas



General recommendations on a strategic level

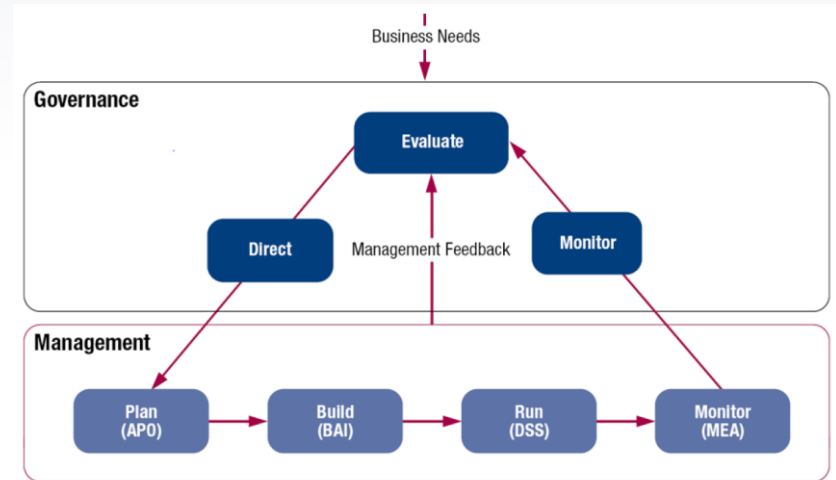
- ▶ **SR1: Broaden the range of public bodies** (governments, local governments, multilateral organizations, higher education institutions) **actively engaged in the Open Data Initiative** in the Alpine Space promoting an Open Data approach, starting from EUSALP institutions.
- ▶ **SR2: Broaden the scope and improve the quality, quantity and range of Open Data** and associated meta-data, as well as improve the quality and range of services provided in Alpine Space adopting common standards and methodologies.
- ▶ **SR3: Promote networking to engage with all stakeholders and encourage use of Open Data**, which includes civil society, governments, local governments, private sector, journalists and media, researchers, donors, and multilateral organizations.

General recommendations on a strategic level

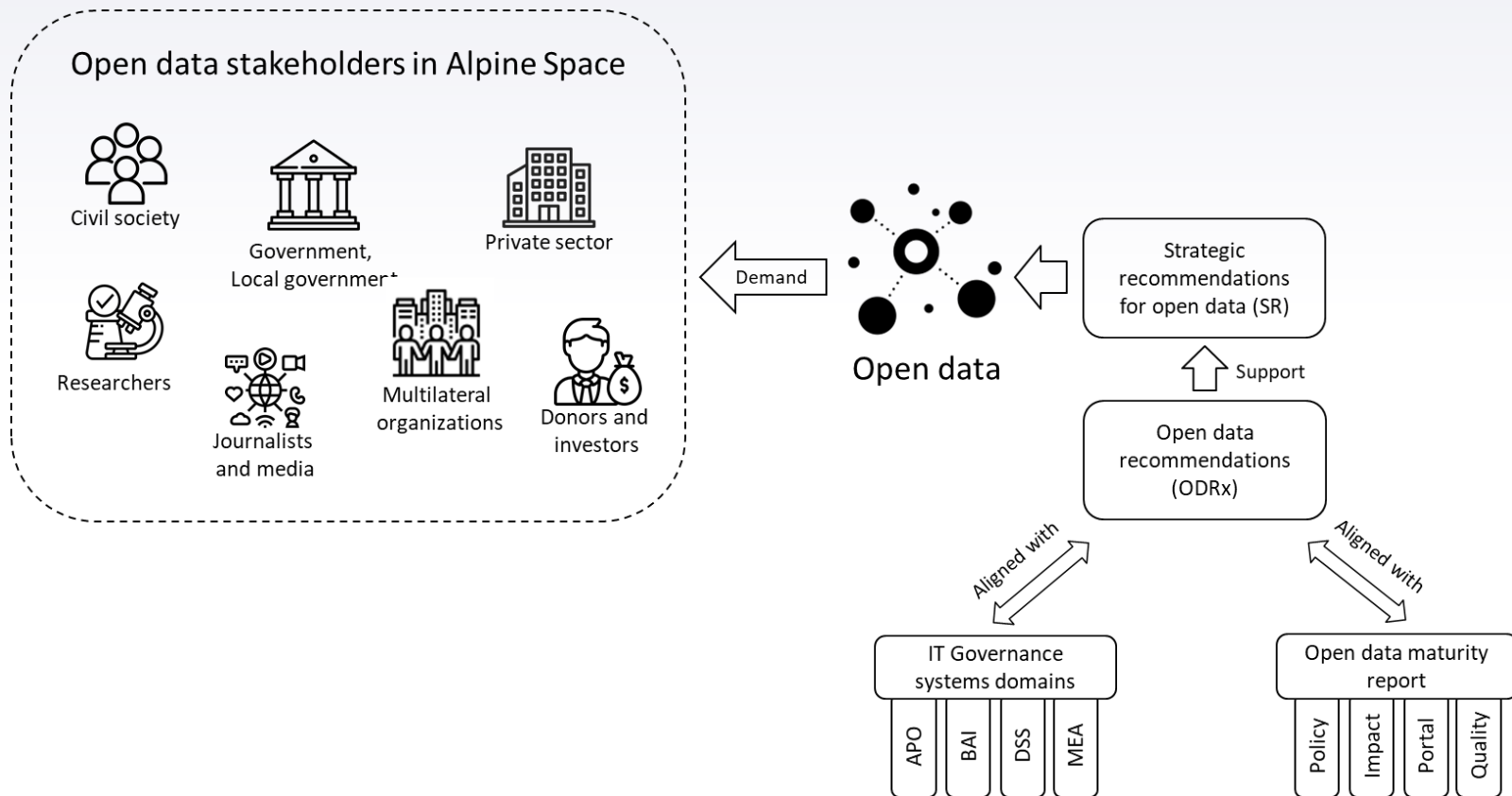
- ▶ **SR4: Support and encourage the adoption of Open Data in the Alpine Space**, embedding the Open Data approach into programmes conditions and requirements for funding new projects.
- ▶ **SR5: Try to define a framework tailored to Alpine Space**, on how to contribute to the main topics of Alpine area, and to ensure that effective governance structures and multilateral organizations are in place to implement the Open Data Strategy in the Alpine Space.
- ▶ **SR6: Monitor and evaluate the impact, benefits, and risks of the Open Data Initiative** in the Alpine Space and benchmark against other MRS (Macro-Regional Strategies).

Open Data Management

- ▶ **Align, Plan and Organize (APO)**
addresses the overall organization, strategy and supporting activities for I&T.
- ▶ **Build, Acquire and Implement (BAI)**
treats the definition, acquisition and implementation of I&T solutions and their integration in business processes.
- ▶ **Deliver, Service and Support (DSS)**
addresses the operational delivery and support of I&T services, including security.
- ▶ **Monitor, Evaluate and Assess (MEA)**
addresses performance monitoring and conformance of I&T with internal performance targets, internal control objectives and external requirements.

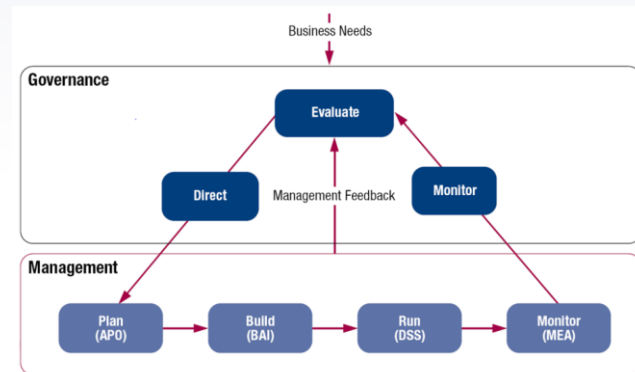


Methodology



Recommendations Summary

- ▶ **6** Strategic Open Data Recommendations (SRs)
- ▶ **46** Open Data Recommendations (ODRs):
 - ▶ 13 ODRs in the APO domain,
 - ▶ 21 ODRs in the BAI domain,
 - ▶ 6 ODRs in the DSS domain, and
 - ▶ 6 ODRs in the MEA domain.



- ▶ ODRs colored by the same colors as defined in the Maturity Level report:

Open Data Policy

Open Data Impact

Open Data Portal

Open Data Quality

Align, Plan, Organize ODRs

ODR1 Develop a dedicated strategy exclusively focusing on open data

ODR2 Define concrete action plans with measurable KPIs

ODR3 Apply measures to incentivise the publication of and access to real-time data

ODR4 Incentivise the re-use of OD by the public and private sector

ODR5 Set up open data ambassadors

ODR6 Elect Chief Data Officers and Open Data Officers

ODR7 Define data publication plans and related monitoring mechanisms

ODR8 Enhance harvesting from local and regional portals

OD Policy

ODR9 Provide an official definition of an open data impact (in strategy documents)

ODR10 Use OD to raise awareness on the different sustainable mobility offers

ODR11 Use open data for economic benefits of public administrations

OD Impact

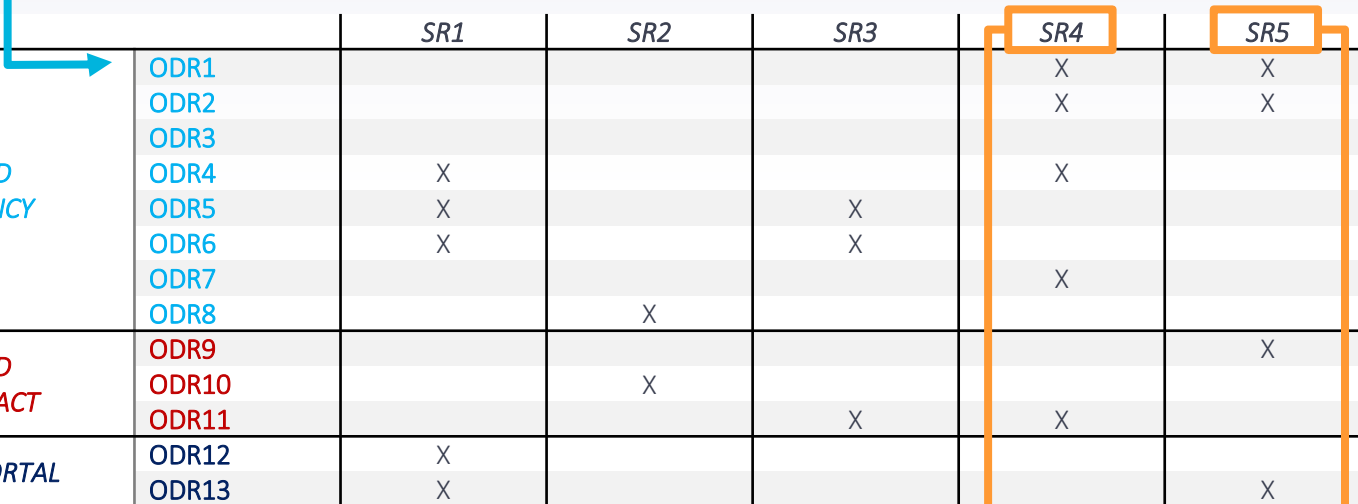
ODR12 Motivate data publishers to make their data discoverable via the national portal

ODR13 Define ways to attract new visitors and engage existing ones

OD Portal

SRs matched with the APO ODRs

ODR1 Develop a dedicated strategy exclusively focusing on open data



		SR1	SR2	SR3	SR4	SR5	SR6
OD POLICY	ODR1				X	X	
	ODR2				X	X	
	ODR3						X
	ODR4	X			X		
	ODR5	X		X			
	ODR6	X		X			
	ODR7				X		X
	ODR8		X				
OD IMPACT	ODR9					X	
	ODR10		X				
	ODR11			X	X		
OD PORTAL	ODR12	X					
	ODR13	X				X	

SR4: Support and encourage the adoption of Open Data in the Alpine Space...

SR5: Define a framework tailored to Alpine Space...

▶ ODR examples

- ▶ **ODR1 – Develop a dedicated strategy exclusively focusing on open data:**
 - ▶ In **Germany**, the national OD policy for the federal level has been part of the national EGovernment act. In Feb 2021, the federal government adopted a Second OD Act and a Data Use Act (corresponding to the transposition of the OD Directive into national law).
 - ▶ In **Slovenia**, the OD policy framework consists of the provisions of the Access to Public Information Act which implements the former PSI Directive.

Build, Acquire, Implement ODRs

ODR14 Provide efficient open data publication process for data providers

ODR15 Provide better public services (e.g., easy access to highly demanded public information)

ODR16 Provide OD-based applications and services that will encourage the inclusion of marginalised groups into society

ODR17 Provide information on housing in urban areas

ODR18 Provide OD about the quality of air and water

ODR19 Provide OD about the noise levels in cities

ODR20 Use OD to improve waste management

ODR21 Open up essential databases to enable economic growth at the macro-economic level

ODR22 Open up essential databases to enable economic growth at the micro-economic level

ODR23 Provide SPARQL search query function

ODR24 Transparently showcase data requests

ODR25 Enable option for a qualitative feedback about the database

ODR26 Provide submit form for use cases that use open data

ODR27 Optimise search data and content

ODR28 Provide API usage

ODR29 Provide enough technical support

ODR30 Provide access to real-time and dynamic data

ODR31 Automate harvesting processes

ODR32 Pre-define approaches for updating metadata

ODR33 Pre-define approaches for updating datasets

ODR34 Provide structured data that is machine-readable, using URIs, and include links to other data sources

OD Policy

OD Impact

OD Portal

OD Quality

SRs matched with the BAI ODRs

		SR1	SR2	SR3	SR4	SR5	SR6
OD POLICY	ODR14		X				
OD IMPACT	ODR15		X	X			
	ODR16		X	X			
	ODR17		X	X			
	ODR18		X	X			
	ODR19		X	X			
	ODR20		X	X			
	ODR21		X				
	ODR22		X				
OD PORTAL	ODR23		X				
	ODR24		X				
	ODR25		X				
	ODR26		X				
	ODR27		X				
	ODR28		X				
	ODR29		X				
	ODR30		X				
OD QUALITY	ODR31		X				
	ODR32		X				
	ODR33		X				
	ODR34		X				

Deliver, Service, Support ODRs

ODR35 Provide guidance and assistance in the form of guidelines and guidebooks

ODR36 Conduct training activities to develop the necessary data literacy and skills to support and enable civil servants working with open data

OD Policy

ODR37 Increase government efficiency by publishing data under an open licence

OD Impact

ODR38 Publish information on the quality of the metadata

ODR39 Incentivise and assist data providers in the publication of data

ODR40 Provide data suppliers with documentation on DCAT-AP

OD Quality

SRs matched with the DSS ODRs

		SR1	SR2	SR3	SR4	SR5	SR6
OD POLICY	ODR35			X	X	X	
	ODR36			X			
OD IMPACT	ODR37	X	X		X		
OD QUALITY	ODR38						X
	ODR39			X			
	ODR40		X				

Monitor, Evaluate, Assess ODRs

ODR41 Monitor portal's usage and audience

ODR42 Regularly conduct satisfaction surveys

ODR43 Monitor portal's performance and usage

OD Impact

ODR44 Monitor the quality of metadata

ODR45 Investigate the most common causes for lack of DCAT-AP compliance

ODR46 Use a model to assess the quality of data deployment

OD Quality

SRs matched with the MEA ODRs

		<i>SR1</i>	<i>SR2</i>	<i>SR3</i>	<i>SR4</i>	<i>SR5</i>	<i>SR6</i>
<i>OD IMPACT</i>	ODR41						X
	ODR42						X
	ODR43						X
<i>OD QUALITY</i>	ODR44						X
	ODR45						X
	ODR46						X