req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
103	Define requirements for ODN	"Define requirements which the publication platform (also referred to as Open Data Node, ODN in short) has to satisfy"	Yes	WP2/A&D	Requirements	Hanecak	Must	106, 125, 193, 194	105	DoW: p 16	D2.1
104	Define requirements for Search	Define requirements which the Search portal (also referred to as Search) has to satisfy	No	WP2/A&D	Requirements	Cornachia	Must	108		DoW: p 16	D2.1
105	Define requirements for ODN relevant for public bodies and other data publishers	"Define aspects of the publication platform for general usage within public bodies and other data publishers (any future user of the platform)"	Yes	WP2/A&D	Requirements	Hanecak	Must	103		DoW: p 17	D2.1
110	Define what data will COMSODE publish	"Define content ... to publish pilot deployments on the ODN within the project – at selected public bodies (project member and associated partners of the project)"	Yes	WP2/A&D	Requirements	Chlapek	Must	111, 130	124	DoW: p 17	D2.1
112	"Assessment of existing tools ... within organizations"	Produce document which will "map and asses existing tools applicable to the project to determine what components will be reused, including the state of each (quality, usability, license) and the purpose they will serve"	Yes	WP2/A&D	Assessment	Hanecak	Must	106		DoW: p 17	D2.1
113	"Assessment of existing ... environments within organizations"	Produce document which will "map and asses the existing environment within selected organizations which want to publish Open Data (...) to determine which variety of information system is used within these organizations for processing of data and how common or rare those are"	Yes	WP2/A&D	Assessment	Hanecak	Must	106, 125		DoW: p 17	D2.1
126	Assessment of common deployment and integration strategies	... in order to provide sufficient material for Deliverable 2.1: "... typical requirements ... along with common integration strategies"	Yes	WP2/A&D	Assessment	Hanecak	Must	125		DoW: p 18	D2.1
125	Produce Deliverable 2.1	"User requirements for the publication platform from target organizations, including the map of typical environments: ... This document will describe typical requirements which the publishing platform will have to satisfy and expected environments which the publishing platform will support along with common integration strategies."	Yes	WP2/A&D	Requirements	Hanecak	Must	193, 194	103, 113, 126	DoW: p 18	D2.1
124	Define "Criteria for the selection of datasets"	see definition of Task 2.3	Yes	WP2/A&D	Requirements	Chlapek	Must	110, 127		DoW: p 17	D2.2
127	Produce Deliverable 2.2	"Criteria for the selection of datasets: This document will provide a set of rules which will be used to refine the selected data sets in Task 3.1"	Yes	WP2/A&D	Requirements	Chlapek	Must		124	DoW: p 18	D2.2
106	"Architecture ... of the publication platform (ODN)"	"produce documentation material describing the architecture ... of the ODN to be developed by the COMSODE project"	Yes	WP2/A&D	Architecture	Hanecak	Must	107, 128	103, 112, 113, 114, 115, 116, 117, 215, 216, 217, 218	DoW: p 17	D2.3
114	Describe supported deployment environments on Architecture level	Architecture document "will also include the description of supported deployment environments (i.e. supported platforms, usually server environments utilizing J2EE)"	Yes	WP2/A&D	Architecture	Hanecak	Must	106, 118, 128		DoW: p 17	D2.3
215	ODN "components will be server-side"	ODN "components will be server-side"	Yes	WP2/A&D	Architecture	Hanecak	Should	106		DoW: p 47	
216	ODN "components will be ... implementad mainly in Java"	ODN "components will be ... implementad mainly in Java"	Yes	WP2/A&D	Architecture	Hanecak	Should	106		DoW: p 47	
217	ODN "components will be ... based on web-services"	ODN "components will be ... based on web-services"	Yes	WP2/A&D	Architecture	Hanecak	Should	106		DoW: p 47	
218	"ODN will be a self-standing publication platform developed for service within heterogeneous environments"	"ODN will be a self-standing publication platform developed for service within heterogeneous environments" meaning we should target "Windows ... Linux, Unix and other platforms"	Yes	WP2/A&D	Architecture	Hanecak	Should	106		DoW: p 47, 48	
141	Employ modular design for ODN	Employ modular design for ODN (statements from DoW: "platform of services has modularity" + "The publication platform will consist of several components and its modular architecture will take into account the reusability of each individual component") so that for example: a) it is easy to deploy parts of ODN b) it is easy to integrate additional modules with ODN This implies also sufficiently potent, stable and easy interfaces for the modules (interfaces: API, CLI, ...).	Yes	WP2/A&D	Architecture	Hanecak	Must	140, 204		DoW: p 32, 34, 48	
204	"Platform-independent technologies and tools are involved in ODN when possible"	When re-using other existing components, prefer platform independent options.	Yes	WP2/A&D	Architecture	Hanecak	Must		141	DoW: p 34	
115	Describe common deployment and integration strategies	Architecture document will also include description of "common deployments and integration strategies"	Yes	WP2/A&D	Architecture	Hanecak	Must	5, 106, 119, 128		DoW: p 17	D2.3
116	Architecture of approach for ETL and publishing	Architecture document will also include description of "the approach of operation for harvesting, enhancement, cleansing, publishing of the data (including APIs)"	Yes	WP2/A&D	Architecture	Hanecak	Must	106, 120, 128		DoW: p 17	D2.3
117	Architecture of user feedback mechanisms	Architecture document will also include description of "solicitation of the feedback from users"	Yes	WP2/A&D	Architecture	Hanecak	Must	106, 121, 139		DoW: p 17	D2.3
108	Architecture of the Search	"produce documentation material describing the ... design of the ODN to be developed by the COMSODE project" (a.k.a. "system design of ODN" - as mentioned in D2.3 description)	No	WP2/A&D	Architecture	Cornachia	Must	109	104, 110	DoW: p 17	D2.3
107	"design of the publication platform (ODN)"	"produce documentation material describing the ... design of the ODN to be developed by the COMSODE project" (a.k.a. "system design of ODN" - as mentioned in D2.3 description)	Yes	WP2/A&D	Design	Hanecak	Must	1, 128	106, 111, 118, 119, 120, 121, 122, 123	DoW: p 17, 18	D2.3
118	Describe supported deployment environments on Design level	Design document "will also include the description of supported deployment environments (i.e. supported platforms, usually server environments utilizing J2EE)"	Yes	WP2/A&D	Design	Hanecak	Must	107, 128	114	DoW: p 17	D2.3

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
119	Design of common deployment and integration strategies	Design document will also include description of "common deployments and integration strategies"	Yes	WP2/A&D	Design	Hanecak	Must	5, 107, 128	115	DoW: p 17	D2.3
120	Design of approach for ETL and publishing	Design document will also include description of "the approach of operation for harvesting, enhancement, cleansing, publishing of the data (including APIs)"	Yes	WP2/A&D	Design	Hanecak	Must	107, 128, 210	116	DoW: p 17	D2.3
121	Design of user feedback mechanisms	Design document will also include description of "solicitation of the feedback from users"	Yes	WP2/A&D	Design	Hanecak	Must	107	117	DoW: p 17	D2.3
122	Define "metrics for measuring and evaluation for testing of project deliveries"	Define "metrics for measuring and evaluation for testing of project deliveries ... for WP6"	No	WP2/A&D	Design	Hanecak	Must	107, 128		DoW: p 17	D2.3
123	Define licenses for software deliveries	"Relevant (mainly open) licenses will be determined for each software component, tool and documentation to allow the project deliveries to be usable both in public sector and for commercial exploitation"	Yes	WP2/A&D	Design	Hanecak	Must	107, 128, 229	219, 220	DoW: p 17	D2.3
219	Choose common licenses.	To maximizes possibility of reuse of COMSODE deliveries: "GNU General Public License version 3, GNU Affero General Public License version 3 and Apache Public License version 2 for the majority of the platform ... GNU Lesser General Public License version 3 or BSD for" components needed for linking with proprietary code	Yes	WP2/A&D	Design	Hanecak	Must	123		DoW: p 49, 55	
220	Maximize possibilities for code resuse from existing Open Source projects.	Maximize possibilities for code resuse (by COMODE) from existing Open Source projects, e.g. like "GPL license (used by many LOD2 and Open Data related projects)"	Yes	WP2/A&D	Design	Hanecak	Must	123		DoW: p 49	
202	Design ODN so that it can be deployed in the Cloud	To cover cases when we're going to publish datasets whose size and complexity can't be handled by resources of COMSODE consortium or data publishers themselves, ODN have to be deployable in the Cloud, say VM pushased from some hosting compenies.	Yes	WP2/A&D	Design	Hanecak	Should	203		DoW: p 34	
221	Desing ODN as "Open Data ready", ODN is supposed to be reference or example implementation.	"The COMSODE project (implementation of the publication platform, methodologies and the pilot project) will help to clarify and test in practise what exact definition for "Open Data Ready" is needed, borrowing heavily from standards and techniques which will be part of methodologies delivered by the project."	Yes	WP2/A&D	Design	Hanecak	Should	13, 222		DoW: p 49 User Group (D2.1, page 38)	
129	Describe APIs	"Architecture and design documentation ... will contain ... description of APIs" meaning we will document the architecture and design of APIs ODN will provide (for datasets but also itself, its functions)	No	WP2/A&D	Design	Hanecak	Must	128		DoW: p 18	D2.3
128	Produce Deliverable 2.3	"Architecture and design documentation for COMSODE development tasks: The architecture and design documentation is the result of task 2.2. It will contain: - architecture of the ODN - system design of the ODN - description of supported deployment environments - common deployments and integration strategies - strategy of operation for harvesting, enhancement, cleansing, publishing of the data - description of APIs (*) - licensing information"	Yes	WP2/A&D	Design	Hanecak	Must		106, 107, 114, 115, 116, 118, 119, 120, 122, 123, 129	DoW: p 18	D2.3
109	TODO: Search design		No	WP2/A&D	Design	Cornachia	Must	3	108	DoW: p 17	

130	"map, asses and compile a list of datasets of project members for the COMSODE pilot implementation"	"map, asses and compile a list of datasets of project members for the COMSODE pilot implementation"	Yes	WP3/D.A.	Assessment	Chlapek	Must	137	110, 134	DoW: p 19	D3.1
134	"initial list of datasets is estimated to contain up to thousand entries ... spanning datasets from "small" ... to "big""	"initial list of datasets is estimated to contain up to thousand entries from Slovakia, Czech Republic (and probably also other countries) spanning datasets from "small" (for example simple classification lists, roughly few kilobytes in size) to "big" (budgeting information for several thousand state agencies covering several years, tens or hundreds of megabytes in size)"	Yes	WP3/D.A.	Assessment	Chlapek	Must	130		DoW: p 19	-
131	"define data transformation, integration, quality assessment, cleansing requirements and techniques"	"define data transformation, integration, quality assessment, cleansing requirements and techniques"	Yes	WP3/D.A.	Requirements	Klimek	Must	111	135, 136, 137	DoW: p 19	D3.2
135	"Task 3.2: User requirements and techniques for data transformation and integration of the published curated data sets"	"Define ways for datasets in D3.1 for transformation (such as data anonymization) and integration (fused, semantically linked) with other data sets during the publication process. Data integration significantly lowers the costs of data consumers. The task leader will evaluate integration requirements with external datasets and, if needed, incorporate the required external datasets to D3.1. Requirements and techniques will guide WP4."	Yes	WP3/D.A.	Requirements	Klimek	Must	131, 138		DoW: p 19	D3.2
136	"Task 3.3: User requirements and techniques for the quality assessment and cleansing of the published curated data sets"	"Define quality assessment metrics for the given selected datasets in D3.1 and which cleansing operations should take place in order to fulfil the quality metrics. The report will guide WP4."	Yes	WP3/D.A.	Requirements	<UNIMIB>	Must	131, 138		DoW: p 19	D3.2

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
132	"define formats and APIs for each dataset to be published, so that it can be consumed easily"	"define formats and APIs for each dataset to be published, so that it can be consumed easily" a.k.a. "Task 3.4: define formats and APIs for each dataset to be published, so that it can be consumed easily" (see task description for more details)	Yes	WP3/D.A.	Requirements	Hanecak	Must	111, 138		DoW: p 19	D3.2
133	"define ways to advertise the published data sets to various Open Data catalogues"	"define ways to advertise the published data sets to various Open Data catalogues" a.k.a. "Task 3.5: define ways to advertise the published data sets to various Open Data catalogues" (see task description for more details)	Yes	WP3/D.A.	Requirements	Hanecak	Must	111, 139, 232	213	DoW: p 19	D3.3
111	Define how will COMSODE publish the data	"Define content and ways to publish pilot deployments on the ODN within the project – at selected public bodies (project member and associated partners of the project)"	Yes	WP3/D.A.	Requirements	Klimek	Must	107, 138	110, 131, 132, 133, 213	DoW: p 17	D3.2
137	Produce Deliverable 3.1	"Final version of the selected datasets list: The datasets selected to be published as open data. Includes datasets from the initial list, supplemented with data sets needed for data integration (see Task 3.2)" (essentially same as req. #130)	Yes	WP3/D.A.	Requirements	Klimek	Must	131	130	DoW: p 20	D3.1
138	Produce Deliverable 3.2	"Summary report on user requirements and techniques for data transformation, quality assessment, cleansing, data integration and intended data consumption of the selected datasets: Output of Tasks 3.2, 3.3 and 3.4 summarizing user requirements and techniques for data transformation, integration, quality assessment, cleansing and consuming of datasets selected for publication." (similar but not same as req. #111)	Yes	WP3/D.A.	Requirements	Klimek	Must	193, 194	132, 135, 136	DoW: p 20	D3.2
139	Produce Deliverable 3.3	"Definition of ways to advertise the published data sets to Open Data catalogues: The output of Task 3.5 will complement the list of datasets published by COMSODE with information about what metadata to submit, how to submit it and to which data catalogue for each dataset. The method for soliciting user feedback about each dataset from the data catalogue or directly from users will be specified too."	Yes	WP3/D.A.	Requirements	Hanecak	Must	193, 194	117, 133	DoW: p 20	D3.3

1	Develop publication platform called Open Data Node (ODN)	Open Data Node (ODN) = OpenData publication platform usable in real-world: "software components (publication platform and supplemental tools)" "development of the publication platform (ODN), review, linking and audit tools for the data published using ODN along with required documentation and proof-of-concept applications" a.k.a. Task 4.1	Yes	WP4/ODN	-	Hanecak	Must	2,3	2, 107	DoW: p 1, 8, 21, 48	
4	ODN usable by various organizations and individuals	ODN usable by gov. organizations, SMEs, other organizations and individuals - meaning mainly "for free" and "easy to use" (which then means "easy to use software" and "usable and easy to follow methodologies for ODN")	Yes	WP4/ODN	-	Hanecak	Must		142, 143, 263, 264, 265, 266, 267, 268, 269	DoW: p 1	
263	"TCO for ODN has to be low"	see section "TCO for ODN has to be low" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4	280	User Group (D2.1, page 36)	
280	ODN have tu support multiple most common Operating Systems	"we need to put more emphasis to ODN being multi-platform, i.e. mainly to run properly on both UNIX based systems and under Windows"	Yes	WP4/ODN	-	Hanecak	Must	263		User Group (D2.1, page 43)	
264	ODN has to support "High availability" deployment	see section "High availability" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 36)	
265	ODN has to be scalable	see section "Scalable implementation" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 36)	
266	ODN has to support deployment in security conscious environments	see section "Operation behind firewall" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 37)	
267	"Well defined release policy and planning for ODN"	see section "Well defined release policy and planning for ODN" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 37)	
268	Open Source based (i. e. free) "Support for ODN has to be quick and of high quality"	see section "Support for ODN has to be quick and of high quality" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 37)	
269	"Support for a wide range of dataset types"	"both static and real-time data sets, as well as both small and large datasets" - for more details see section "Support for a wide range of dataset types" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to implementation and some to documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	4		User Group (D2.1, page 38)	
142	"Software tools have to be easy to deploy and maintain"	"Software tools have to be easy to deploy and maintain"	Yes	WP4/ODN	-	Hanecak	Must	4	201	DoW: p 21	
201	Basic functionality works out of the box.	"It will be possible to easily deploy, run and use the product with basic functionalities without knowledge of advanced functionalities. These functionalities will be only optional."	No	WP4/ODN	-	Hanecak	Should	142		DoW: p 34	
143	Develop interfaces for general public which are "easy to learn and use"	Develop interfaces (GUI) for general public which are "easy to learn and use"	Yes	WP4/ODN	-	Hanecak	Must	4		DoW: p 21	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
209	ODN as data integration platform: has to allow development of applications and services based on data from multiple sources	"A software infrastructure allowing the building of a data integration platform as delivered by the COMSODE project will support the development of services based on Open data" meaning mainly that ETL part have to allow harvesting and integration of data from multiple sources and publishing part then have to allow development of efficient apps and services on-top of that integrated data.	Yes	WP4/ODN	-	Hanecak	Must	13	12, 25, 30, 66, 95, 96, 144, 208, 210	DoW: p 46	
13	ODN as integration platform based on OpenData	allow re-use of OpenData among public bodies themselves: "Public bodies can exchange information by using the same infrastructure and tools as end-users which will decrease costs of exchanging the data and in most cases also enhance the quality and speed-up of the exchange. What is even more important, OpenData APIs can be used by integration projects between public bodies, again saving costs and enhancing the quality of the resulting solution. This in turns strengthens OpenData publishing, with end-users benefiting again – a self reinforcing loop."	Yes	WP4/ODN	-	Hanecak	Must	16, 77	209, 221, 262	DoW: p 1	
262	"ODN integration with internal systems has to be easy and secure"	see section "ODN integration with internal systems has to be easy and secure" in D2.1 (TODO: this should be split into multiple requirements, as some statements relate to Architecture, some to implementation and some to Documentation, etc.)	Yes	WP4/ODN	-	Hanecak	Must	13		User Group (D2.1, page 35)	
18	ODN implementation will reuse results from other EU/international OpenData or Open Source projects	DoW, p 1: "builds on results of previous research and development in the linked data field" DoW, p 4: "The concept takes into account past developments in the EU, either in collaborative projects, national initiatives or strategies of various bodies" DoW, p 5: "Implementation will reuse and build on top of several existing Open Data and Semantic Web components (for example from LOD2 stack)." DoW, p11: "The project will then apply ... tools based on LOD2 (and others) to publish them as (Linked) Open Data of high quality ..."	No	WP4/ODN	-	Hanecak	Must	57, 58, 59, 60, 61, 62, 63, 64, 65	83	DoW: p 1, 4, 5, 8, 9, 11	
20	ODN helps overcome difficulties in OpenData publishing	"Legacy and proprietary data formats are used widely - Combining multiple sources of data for analysis or application development is hard; Quality of data is not reliable;"	Yes	WP4/ODN	-	Hanecak	Must	47	25	DoW: p 4, 8	
22	"Open Source implementation of an Open Data publication platform" (to allow further re-use of the platform)	ODN as "new open source platform for open data publishing, search, application development and collaboration - as a base for innovative services and applications" + "Implementation of software components and tools mainly for public bodies supporting the whole life cycle of reuse of multilingual open data along with easy deployment procedures and data publications methodologies - further referred to as Open Data Node (ODN)" + "Open Source licensing: ODN will mostly be licensed by a combination of the GNU General Public License version 3, GNU Affero General Public License version 3 and Apache Public License version 2. A small portion will be licensed using the GNU Lesser General Public License version 3 or the BSD license to allow commercial use and re-use. These particular licenses were chosen because they are widely used, recognized and understood both by developers and users of Open Source software. Open Source licensing will enable us to reach users with restricted budgets or users that already recognize economic and other benefits of Open Source and thus prefer it in their procurement process - public bodies in particular often belong to at least one of the two groups." + "Open Source nature of the COMSODE will allow SMEs also to reduce their costs, thus making the impact even bigger"	Yes	WP4/ODN	-	Hanecak	Must	23,27		DoW: p 5, 8, 46	
26	"Support the deployment of hierarchies of Open Data Nodes"	"Support the deployment of hierarchies of Open Data Nodes (mirroring and combining selection of datasets) to better serve specific users and applications based on their demands (NGOs interested in specific topics, commercial entities building applications demanding higher performance, etc.)."	Yes	WP4/ODN	-	Hanecak	Must	71, 93		DoW: p 5	
27	ODN usable also as base for commercial offerings	licensing must allow ODN to be "Usable also by SMEs as base for their commercial offerings (application, services, ...) serving as data mirror or data integration platform, providing APIs, etc."	Yes	WP4/ODN	-	Hanecak	Must		22	DoW: p 5	
66	ODN allowing re-publishing of data in legacy formats using state-of-the-art methods	"Make publishing of high quality (linked) open data easy (along with periodical updating) mainly by ... conversion, enhancement, linking and republishing also data in legacy formats using state-of-the-art methods (Linked Data, APIs, etc. – loosely coupled, easier to implement)" "The platform will involve components and tools for harvesting, converting, enhancement, linking, integration, quality assessment, reviewing and auditing the published datasets"	Yes	WP4/ODN	-	Hanecak	Must	21, 209		DoW: p 8, 21, 46	
28	ODN supports publication of multilingual OpenData	"The publication platform ODN will support the publication of Open Data following multilingual patterns for naming, dereferencing, labelling, linking and reuse using multiple languages. In particular, Czech, Slovak and Italian are some examples of the used languages for the COMSODE pilot cases."	Yes	WP4/ODN	-	Hanecak	Must			DoW: p 5	
101	"Agile methodologies applied to the development phases (WP4 and WP5)"	"Agile methodologies applied to the development phases (WP4 and WP5)" + "review and adapt strategy quickly when changes with impact on the project occur" + "agile development methods: we will do initial release early in development phase and then iterate towards the goal, re-evaluating next steps each time we identify a change or risk"	Yes	WP4/ODN	-	Hanecak	Must	102		DoW: p 12, 32, 33	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
102	Feedback from pilot in MoI SW will be reflected in WPO4 and WP5	"A pilot will be started in cooperation with MoI ... Feedback from the pilots will be periodically evaluated and used as input for the project in all phases (WPs from 2 to 5)"	Yes	WP4/ODN	-	Hanecak	Must	99	101	DoW: p 12	
140	Publishing platform have to provide ways to extend it with more components.	"The platform will involve components and tools for harvesting, converting, enhancement, linking, integration, quality assessment, reviewing and auditing the published datasets"	Yes	WP4/ODN	-	Hanecak	Must		140	DoW: p 21	
205	Provide easy installation procedure for ODN	Provide easy installation procedure for ODN as combination of code (deploy scripts) and documentation.	Yes	WP4/ODN	-	Hanecak	Must	203, 214		DoW: p 34	
203	Implement installation procedure for ODN in the Cloud.	Given req. #202 we need to either document the ODN installation proces to cover also installation in one or more Cloud environments or implement a deploy script(s). Or both.	No	WP4/ODN	-	Hanecak	Should		202, 205	DoW: p 34	
230	ODN supports attachents as part of dataset.	For cases like List of contracts or Land use plan, there will be some graphical or other data (scans of contracts, maps, ...) "attached" to the main dataset (list of contrsacts, ...). ODN should be able to harvest also those attachmentds and then be able to re-publish them.	Yes	WP4/ODN	-	Hanecak	Could			User Group (D2.1, page 41)	
231	ODN supports visualization of large graphical files	For cases like Land use plan ("uzemny plan") huge (in range of few tenths or few hundered megabytes) JPEG or TIFF files are used to export data from planning GEO systems. Those files are hard to view for common users. So some visualization tool is required to allow quick zooming and view move in the image.	Yes	WP4/ODN	-	Hanecak	Could			User Group (D2.1, page 41)	
229	"The source code and related documentation will be published ... on public repositories (like GitHub)" along with "all the subsequent enhancements"	"The source code and related documentation will be published early in the development phase (beginning of WP4) on public repositories (like GitHub) and all the subsequent enhancements will be publicly visible"	Yes	WP4/ODN	-	Hanecak	Must	156, 158	123	DoW: p 55	
261	"ODN implementation has to comply with laws and regulations"	"ODN cannot comply with all relevant laws - but must have potential to be tuned (configured) accordingly." meaning mainly "EU-wide directives and regulations (like Directive 95/46/EC etc.)" and "laws and regulations applicable to project members and associated partners (for example Italian Article 68 (Comparative analysis of solutions) - Leg. 82/2002 or Slovak law number 275/2006 Z.z. and related decrees)	Yes	WP4/ODN	-	Hanecak	Should			User Group (D2.1, page 34)	
29	review and audit tools for the data	"Review and audit tools for the data: Tools will be focused both for data owners (public services) and for the re-users of Open Data (end users, application developers, including SMEs, etc.)."	Yes	WP4/ODN	other	Hanecak	Must	75	30,31,32,33,34	DoW: p 5	
30	tools for data cleansing and enrichment	"to help users and publishers to resolve duplicates, inconsistencies and other defects in published data"	Yes	WP4/ODN	other	Hanecak	Must	29, 209		DoW: p 5	
32	tools for evaluation of data quality	"to evaluate and publish the justified quality scores for datasets"	Yes	WP4/ODN	other	Hanecak	Must	29, 70		DoW: p 5, 47	
33	ODN distribution have to bundle the review and audit tools for the data	at last one ODN distribution option (ISO or VM) have to include also all the review and audit tools we compile/provide to supplement ODN	No	WP4/ODN	other	Hanecak	Should	29			
208	ODN has to "allow SMEs to be less dependent on assistance of public bodies with re-use of Open Data"	ODN has to "allow SMEs to be less dependent on assistance of public bodies with re-use of Open Data by allowing them to efficiently mirror and transform the data" giving them "independence and wider possibilities"	No	WP4/ODN	other	Hanecak	Must	209	71	DoW: p 46	
210	ODN have to contain extendable ETL module	ODN have to contain extendable ETL module which supports harvesting of data, its cleansing and integration and other operations so that resulting data suits project goals (i.e. is suitable for Open Data publishing and application development). + "The project will deliver ... the Open Data Node publication platform, ETL tools, provenance and quality assessment tools, etc."	Yes	WP4/ODN	ODN/ETL	Hanecak	Must		31, 120, 200, 209, 211, 252, 253	DoW: p 46	
211	ODN's ETL have to support Linked Data	"The project will implement means for cleansing, integrating [of] linked open data" i.e. both as input and output	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	210, 212		DoW: p 46	
31	compile and store audit trail information for later publication to the users	ODN's DPUs (harvesting, cleansing and enrichment tools) have to collect and store also the metadata related to where the data comes from and how it was created or altered (a.k.a. audit trail) "to build confidence in published data by providing descriptive and provenance metadata about how the data was published"	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	29, 75, 210	58, 59, 60, 61	DoW: p 5	
25	ODN will allow "automated, repeatable publishing of (linked) data, including timely updates"	... by providing generic reusable components for common cases and allow easy creation/implementation of specific coponents for corner cases	Yes	WP4/ODN	ODN/ETL	Hanecak	Must		20, 53, 72, 93, 209, 236, 237, 251	DoW: p 5, 8 User Group (D2.1, page 31)	
57	use LOD Link discovery	"use link discovery to link datasets published as LOD (WP3 and WP4)"	?	WP4/ODN	ODN/ETL	Hanecak	Must	18		DoW: p 8	
58	"Extend the SIEVE data quality framework to Open Data"	"Extend the SIEVE data quality framework to Open Data (integrating results for relational DBs); (WP3-4)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18, 31		DoW: p 8	
59	SIEVE: "Extend the number of dimensions considered"	SIEVE: "Extend the number of dimensions considered (special focus on time-related dimensions); (WP3)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18, 31		DoW: p 8	
60	SIEVE: "More dataset Independence"	SIEVE: "More dataset Independence; (WP3)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18, 31		DoW: p 8	
61	SIEVE: "Quality Dashboard Tool"	SIEVE: "Quality Dashboard Tool (WP4)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18, 31		DoW: p 8	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
62	use LOD2/LDIF	"Use the components and the methodology [from LOD/LDIF]; create a GUI to support users in performing their ETL processes; optimize for government data (e.g., wrt government standard taxonomies) (WP4)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18		DoW: p 8	
63	use OKKAM/Identity management	"Use OKKAM for resolving and cleansing identifiers in Open Data published as LOD (WP3-4)"	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18		DoW: p 8	
64	use PlanetData/Vocabulary search	"Use "functionality of Vocab.cc (search/lookup) on top of ODN schema metadata (wp4-5)	?	WP4/ODN	ODN/ETL	<UNIMIB>	Must	18		DoW: p 8	
83	exploit and cooperate with LOD2 project	"exploit the tools in the LOD2 stack and other projects. LOD2 "Creating Knowledge out of Interlinked Data" - this EU FP7 project aims at promotion and improvement of the Linked Data technologies. Some of the state-of-the-art Linked Data software tools are part of the LOD2 stack. Some of the COMSODE consortium members actively participate in the LOD2 project. This allows effective exchange of experience between LOD2 and COMSODE projects. Relevant software tools that are part of the LOD2 stack will also be used and extended or improved during the COMSODE project. In case of the LOD2 stack tools developed as open source software, improvements achieved during the COMSODE project will be contributed to the respective LOD2 stack components code base" + "tools and methodologies (under Open licenses) in general will complement the existing LOD2 stack (for example development on top of Linked Data Manager – part of LOD2 – and ODCleanStore will contribute ETL functionality not available in LOD2 stack)"	No	WP4/ODN	ODN/ETL	Knap	Must	18, 84		DoW: p 9	
95	support for "publishing or republishing of subsets of original data"	ODN have to support "publishing or republishing of subsets of original data (for specific topics, purposes, applications)" meaning mainly a generic, configurable "filtering DPU" in ODCS allowing to pass to subsequent stages in pipeline only subset of input data (so only subset gets transformed, enriched, stored and republished)	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	93, 209		DoW: p 10	
96	support for "publishing or republishing of supersets of original data"	ODN have to support "publishing or republishing of supersets containing also new meta information derived from original data (cleaned up, enriched, new facts obtained by combining existing facts, etc.)" meaning mainly that ODCS have to provide DPUs for enrichment	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	93, 209		DoW: p 10	
200	ODN provides option to keep exact copy of harvested dataset in the ODN	i.e. mirroring of datasets copied from elsewhere a.k.a. "Just Grab It" feature described in Wiki	Yes	WP4/ODN	ODN/ETL	Hanecak	Should	210		DoW: p 33	
252	"Non-invasive enhancements to datasets"	"ODN should be able to provide some basic transformations which increase the quality of datasets but do not change the meaning of data, for example character encoding fixes and conversions, removal of quoting, file format conversions, etc."	Yes	WP4/ODN	ODN/ETL	Hanecak	Should	210		User Group (D2.1, page 33)	
253	"Linking of data entries to official registries"	"ODNs, as part of ETL and enrichment, have to provide functionality to clean-up (or even link, if the format allows is) data from processed dataset to official registries (i.e. other datasets)." Applies also to non-Linked Data, i.e. in say CSV files it means replacing "bad values" with "official values" instead of true linking.	Yes	WP4/ODN	ODN/ETL	Hanecak	Should	210		User Group (D2.1, page 33)	
256	"ODN implementation has to provide sufficient features for proper anonymization of data"	"ODN implementation has to provide sufficient features for proper anonymization of data"	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	260	257, 258, 259	User Group (D2.1, page 34)	
257	"ETL part must be able to skip some rows and columns from source raw data"	to aid anonymization	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	256		User Group (D2.1, page 34)	
258	"ETL part must be able to introduce some noise into transformed data"	to aid anonymization	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	256		User Group (D2.1, page 34)	
259	"ETL part must be able to randomize transformed data"	to aid anonymization	Yes	WP4/ODN	ODN/ETL	Hanecak	Must	256		User Group (D2.1, page 34)	
39	feedback mechanism from public to data publisher	ODN should support some basic forms of feedback mechanism from general public (data users) to data publisher for cases where publisher does not have any other usable feedback mechanism in place. a.k.a. "ODN will provide ... interfaces to solicit feedback about published data from the public/users"	Yes	WP4/ODN	ODN/catalogue	Hanecak	Could	38, 82, 275, 276	40	DoW: p 21	
275	"Dataset wishlist"	see section "Dataset wishlist" in D2.1	Yes	WP4/ODN	ODN/catalogue	Hanecak	Should		39	User Group (D2.1, page 40)	
276	"Feedback about quality of data"	see section "Feedback about quality of data" in D2.1	Yes	WP4/ODN	ODN/catalogue	Hanecak	Should		39	User Group (D2.1, page 40)	
40	dataset management GUI for ODN	GUI for common dataset management tasks for datasets published via ODN: list, search (in metadata), sort results, add/edit datasets (and their metadata), ...	Yes	WP4/ODN	ODN/catalogue	Hanecak	Should	39	42		
43	GUI to manage per-dataset list of data catalogs	GUI to manage per-dataset list of datacatalogs into which the dataset metadata will be automatically pushed	Yes	WP4/ODN	ODN/catalogue	Hanecak	Must	42	78		
78	bundle data catalog with ODN	bundle some data catalog (most probably CKAN) with ODN	Yes	WP4/ODN	ODN/catalogue	Hanecak	Must	43, 232			
79	bundled data catalog have to keep track of which applications use what datasets	make sure selected bundled data catalog (eitherr by choosing one which does that or exteding some other to do that) is able to keep track of which application is using what dataset(s)	Yes	WP4/ODN	ODN/catalogue	Hanecak	Must	82	78		

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
80	management GUI for ODN administrator to manage list of applications	management GUI for ODN administrator to manage list of OpenData applications and their relation (use) of certain datasets (from given ODN instance)	Yes	WP4/ODN	ODN/catalogue	Hanecak	Must	82	78		
81	list and search GUI for general public for applications	list and search GUI for general public for applications to browse throug application list, each application entry have to list datasets used (and link to catalog pages for those datasets) and vice versa (dataset pages have to list applications using the dataset and link to application catalog page)	Yes	WP4/ODN	ODN/catalogue	Hanecak	Must	76, 82	80		
82	GUI for users to submit new or update information about applications	... sumbimited information will be directed to administrator who then approves, updates or rejects the submission	Yes	WP4/ODN	ODN/catalogue	Hanecak	Should	39, 81	79, 80		
12	ODN allows easy "development of 3rd party intuitive and responsive open data applications and services (including commercial ones)"	ODN implementation and documentation (mentioned/linked in Methodologies) have to support easy creation of application using OpenData published via ODN. Validated using three ODN deployments. a.k.a. "APIs and tools for cross-platform development of applications based on Open Data" a.k.a. "ODN will provide APIs and data dumps for cross platform development of open data applications on multimodal devices and environments (such as mobile, tablet as well as desktop)" (same as requirement #68)	Yes	WP4/ODN	ODN/publication	Hanecak	Must	13, 14, 15, 21, 52, 53, 68, 209	9,35	DoW: p 4, 6, 21, 46	
21	ODN creates "an environment enabling easier and more reliable re-use of Open Data"	This is same as requirement #12 but worded differently (to suit project intro for Part A).	Yes	WP4/ODN	ODN/publication	Hanecak	Must		12, 66	DoW: p 5	
35	ODN supports "wider, standardized possibilities to access the data"	"wider, standardized possibilities to access the data: data dumps in multiple formats (RDF, CSV, ...) and several types of API (SPARQL, REST, JSON, ...) - to support cross platform development for delivering intuitive and responsive open data applications on multimodal devices and other environments (such as mobile, tablets as well as desktop)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	12, 69	212	DoW: p 6, 21	
212	ODN has to support publication of Linked Open Data	"The project will implement means for ... publishing the data sets as linked open data"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	35, 211		DoW: p 46	
42	ODN integration with data catalogues	ODN integration with data catalogues using DCAT-AP, ... so that data publishers can manage dataset metadata in ODN and then push it to one or more datacatalogs automatically thus saving effort	Yes	WP4/ODN	ODN/publication	Hanecak	Must	40, 41, 232	43, 65		
65	use DCAT-AP	"Use the profile to enabling the search published LOD among different ODN (WP6)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	18, 42, 232		DoW: p 8	
232	ODN must keep and publish also dataset lincense as part of dataset metadata	License (in a form of license name or URL of License) must be stored in dataset metadata in OPDN and must be made available to general public.	Yes	WP4/ODN	ODN/publication	Hanecak	Must	42, 78, 133, 234	65	User Group (D2.1, page 31)	
273	"ODN instance have to store this [ownership] information and make it available to users"	ODN instance have to store dataset ownership information and make it available to users	Yes	WP4/ODN	ODN/publication	Hanecak	Must	272, 274			
68	"Make development of ... applications ... based on open data easy"	(same as requirement #12) "Make development of cross platform applications (even commercial ones by SMEs) on multimodal devices and other environments based on open data easy"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	12	69, 70, 71, 72	DoW: p 9	
69	"wider options for APIs and data formats"	"wider options for APIs and data formats"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	35, 68	238, 239, 240, 241	DoW: p 9	
238	Datasets published as CSV dumps	"Application developers defined requirement, that datasets (their contents) must be accessible as so called "dumps" in files. Following formats have to be available: CSV, ..."	Yes	WP4/ODN	ODN/publication	Hanecak	Must	69		User Group (D2.1, page 32)	
239	Datasets published as RDF dumps	"Application developers defined requirement, that datasets (their contents) must be accessible as so called "dumps" in files. Following formats have to be available: ... RDF"	Yes	WP4/ODN	ODN/publication	Hanecak	Should	69		User Group (D2.1, page 32)	
240	Datasets published via REST API	"Application developers defined requirement, that datasets (their contents) must be accessible also via API: REST, ..."	Yes	WP4/ODN	ODN/publication	Hanecak	Must	69		User Group (D2.1, page 32)	
241	Datasets published via SOAP API	"Application developers defined requirement, that datasets (their contents) must be accessible also via API: ... SOAP"	Yes	WP4/ODN	ODN/publication	Hanecak	Should	69		User Group (D2.1, page 32)	
70	"publication of quality data and metadata"	"publication of quality data and metadata"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	32, 68, 75	242, 243, 244, 245, 246, 247, 248, 249, 250	DoW: p 9	
242	"Provide list of datasets as Linked Data"	"List have to contain all relevant metadata about each dataset: ID, name, license, etc. See DCAT for more exhaustive list of dataset metadata attributes although ODN will hold (and make available) also some more in order to implement its functions. Essentially, such list is a dataset too. It can be generated by ODN automatically and published along with other datasets."	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 32)	
243	API to obtain dataset metadata	"Dataset metadata available via API: obtain the metadata: source URL, license, type, update frequency, etc."	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 32)	
244	API to obtain list of dataset	"Dataset metadata available via API: obtain list of datasets" in particular ODN instance	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 32)	
245	API to search in list of dataset	"Dataset metadata available via API: search in the list of datasets" in particular ODN instance	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 32)	
246	API to "obtain a list of available versions of dataset"	API to "obtain a list of available versions of dataset"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 33)	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
247	API to "obtain an exact version of a dataset as dump in a file"	API to "obtain an exact version of a dataset as dump in a file"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 33)	
248	API to "obtain the latest version of a dataset as dump in a file"	API to "obtain the latest version of a dataset as dump in a file"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	70		User Group (D2.1, page 33)	
249	API to "obtain a so called "diff" between specified and previous version of a dataset"	API to "obtain a so called "diff" between specified and previous version of a dataset"	Yes	WP4/ODN	ODN/publication	Hanecak	Could	70		User Group (D2.1, page 33)	
250	API to "search through content of a dataset, with matching results returned in JSON format"	API to "search through content of a dataset, with matching results returned in JSON format"	Yes	WP4/ODN	ODN/publication	Hanecak	Could	70		User Group (D2.1, page 33)	
71	"easy republication/mirroring of whole datasets"	"easy republication/mirroring of whole datasets"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	68, 93, 208	26	DoW: p 9, 46	
72	"effective propagation of updates"	ODN have to support "effective propagation of updates" a.k.a. "efficient propagation of updates (for datasets which maintained and updated periodically)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	25, 68, 93		DoW: p 9, 10	
73	ODN provides users with metadata, preview and other means to understand the data	"Help users to understand the data, asses quality, detect inconsistencies, resolve issues and most importantly help them choose the right data for their needs"	Yes	WP4/ODN	ODN/publication	Hanecak	Must		74, 75, 76, 77	DoW: p 9	
251	"Notifications for new datasets and updated datasets"	"Application developers defined the requirement that ODN should be able to provide the following notifications related to the status of datasets in ODN instance: - new dataset added, - dataset updates (changes in either content or metadata). Requested protocol: RSS, Atom or other suitable."	Yes	WP4/ODN	ODN/publication	Hanecak	Must	25		User Group (D2.1, page 33)	
74	ODN provides information about datasets	"an aggregated and integrated view of the data including information about it (metadata)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	73	42, 78	DoW: p 9	
75	ODN allows user to view and download quality of the data	allow user to view and download "quality and score of the data and its relation to other data (LOD2 rarely addresses this)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	73	31, 70	DoW: p 9	
76	ODN allows users to see dataset relations to applicationd	allow users to view and download "relations to open data applications (easy to find those using certain datasets and vice versa)"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	73	76	DoW: p 9	
93	"decentralized publishing so the data can be published close to the original source"	ODN have to support "decentralized publishing so the data can be published close to the original source"	Yes	WP4/ODN	ODN/publication	Hanecak	Must	26, 72, 94	25, 71, 72, 95, 96	DoW: p 10, 47	
97	"methodologies based on Linked Data Around the Clock (LATC)" applied to datasets published by project	"methodologies based on Linked Data Around the Clock (LATC)" applied to datasets published by project	Yes	WP4/ODN	ODN/publication	Hanecak	Must	55		DoW: p11	
56	GUI for ODN	ODN have to provide GUI optimized for government data (i.e. data publisher).	Yes	WP4/ODN	ODN/management GUI	Hanecak	Must			DoW: p 8	
14	proof-of-concept demo applications using ODN	Simple "Hello World" style appllications ilustrating how to build OpenData based applications using ODN. Part of ODN documentation, mentioned/linked in Methodologies.	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	9,17	12, 144, 145, 146, 147	DoW: p 4, 47	
144	Proof-of-concept apps have to demonstrate usage of APIs	"Proof of concept applications will be developed to demonstrate how to build open data applications using ODN (employing APIs ..."	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	14, 209		DoW: p 21	
145	Proof-of-concept apps have to combine data from ODN with other Linked Data	"Proof of concept applications will be developed to demonstrate how to build open data applications ... combining data from ODN with other Linked Open Data ..."	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	14		DoW: p 21	
146	Proof-of-concept apps have to combine data from ODN with user's own data	"Proof of concept applications will be developed to demonstrate how to build open data applications using ODN ... combining data from ODN with ... user's own data (preferences, hobbies, ...) ..." ("user" meaning "user of the application being developped", so app have to access that information from somewhere, like storing it in its own DB, letting user fill and update it via web GUI)	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	14		DoW: p 21	
147	Proof-of-concept apps have to combine data from ODN with contextual information	"Proof of concept applications will be developed to demonstrate how to build open data applications using ODN ... combining data from ODN with ... contextual information (for example GPS location on mobile devices)" ("user" meaning "user of the application", thus context informations comes from his device or himself)	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	14		DoW: p 21	
23	ODN documentation have to cover also Open Source aspect of the project	ODN documentation have to cover also Open Source aspect of the project: licensing, whwre is the code, how to check it out, how to build and deploy it, how to develop and submit patches, etc.	Yes	WP4/ODN	ODN/documentation	Hanecak	Should		22		
237	ODN documentation has to give guidance and examplaes about automated and repeatable publishing of data	"Documentation of the ODN ... covering specific usage of ODN has to give clear guidance and examples about how to use ODN for automated and repeatable publishing of data."	Yes	WP4/ODN	ODN/documentation	Hanecak	Must	236	25	User Group (D2.1, page 32)	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
148	Deploy and maintain support infrastructure for the ODN components	"In the scope of this task is also the creation of a support infrastructure for all components which will be published using an Open Source license and which do not yet have such infrastructure"	Yes	WP4/ODN	other	Hanecak	Must		149, 150, 151, 152	DoW: p 21	
149	Deploy and maintain public website for ODN components	"public web page(s)"	Yes	WP4/ODN	other	Hanecak	Must	148	150	DoW: p 21	
150	Deploy and maintain wiki for ODN components	"Wiki-based knowledge base" + "with social functions"	Yes	WP4/ODN	other	Hanecak	Must	148, 149		DoW: p 21, 54	
151	Deploy and maintain public source code repository for ODN components	"public source code repository"	Yes	WP4/ODN	other	Hanecak	Must	148		DoW: p 21	
152	Deploy and maintain public issue tracker for ODN components	"public issue tracker at minimum"	Yes	WP4/ODN	other	Hanecak	Must	148		DoW: p 21	
156	Produce Deliverable 4.1	"COMSODE publication platform - Open Data Node – for test: The delivery will consist of software components and tools along with the documentation sufficient to deploy, use and maintain the solution. Proof of concept applications will be included too. The delivery will be licensed under a set of Open Source licenses (...), so all such parts will be available on the project website for free download."	Yes	WP4/ODN	other	Hanecak	Must	157, 158, 193, 194, 195	229	DoW: p 21	D4.1
157	Produce Deliverable 4.2	"Tailored search application on-top of data published using ODN – for test: Freely accessible search application based on SPINQUE 's "Search by Strategy" concept, tailored to open data published as part of the COMSODE project."	Yes	WP4/ODN	other	Hanecak	Must	159	156	DoW: p 21	D4.2
158	Produce Deliverable 4.3	"COMSODE publication platform - Open Data Node –final"	Yes	WP4/ODN	other	Hanecak	Must	159, 193, 194, 195	156, 229	DoW: p 21	D4.3
159	Produce Deliverable 4.4	"Tailored search application on-top of data published using ODN – final"	Yes	WP4/ODN	other	Hanecak	Must		157, 158	DoW: p 21	D4.4

2	Methodology framework	"easy usable methodology for data publication beneficial to both sides of the service – data owners (e.g. public bodies) and re-users (applications of SMEs, NGOs, public bodies, etc.)"	No	WP5/Methodologies	-	<UNIMIB>	Must		1	DoW: p 1, 4, 8, 24, 48	
172	Use Open license for the Methodologies	"The methodologies will be released under suitable open licenses for the benefit of SMEs and public bodies."	Yes	WP5/Methodologies	-	<UNIMIB>	Must	177		DoW: p 25	
7	Methodologies for easy use in operating conditions of typical public bodies	Methodologies for easy use in operating conditions of typical public bodies ("easy to follow methodologies and recommendations")	No	WP5/Methodologies	-	<UNIMIB>	Must	6, 66, 99, 169		DoW: p 1, 8	
10	Methodologies verified by three pilots	"Create a methodology framework for easy use of technology in operating conditions of typical public bodies and rigorously tested for traceability, usability and sustainability in a public body environment. This is going to be verified in three pilot implementations during the project. End user-communities will be involved EU-wide to set a use case framework within which the requirements of heterogeneous organisations can be clearly understood. Provided feedback will be processed into the final methodology and recommendations for re-use applications."	No	WP5/Methodologies	-	<UNIMIB>	Must	67	9	DoW: p 1	
37	Methodologies describing "how to integrate this publishing with existing data related processes"	Methodologies describing "how to integrate this publishing with existing data related processes in organizations producing the data"	No	WP5/Methodologies	-	<UNIMIB>	Must	5		DoW: p 6, 24	
38	Methodologies describing "how to solicit public demand and capture user feedback"	Methodologies describing "how to solicit public demand and capture user feedback in order to optimise reuse of published open data both in terms of content and in terms of functionalities/usability (including reuse by applications)"	No	WP5/Methodologies	-	<UNIMIB>	Must	39,41		DoW: p 6	
41	Methodologies covering "integration with data catalogues and other Open Data and Semantic Web solutions"	Methodologies covering "integration with data catalogues and other Open Data and Semantic Web solutions": - "for better linking of information" - "to support feedback and demands from the public (users of existing data or potential users of yet to be published data) to the public bodies (producing the data) via Open Data catalogues"	No	WP5/Methodologies	-	<UNIMIB>	Must	5, 38	42	DoW: p 6, 24	
54	Slovak translation of final Methodologies	"Methodologies delivered by the project will be usable by the Slovak Government"	No	WP5/Methodologies	-	<UNIMIB>	Must	177		DoW: p 7	
55	other translations of final Methodologies	"Methodologies delivered by the project will be usable by the Slovak Government and others"	No	WP5/Methodologies	-	<UNIMIB>	Could	177		DoW: p 7	
85	consider Linked Data Around the Clock (LATC) when creating Methodologies	"Linked Data Around the Clock (LATC) project's best practices will be considered when creating methodologies for publishing Open Data. Datasets published by LATC project will be considered as datasets we integrate our selected datasets with (see Delivery 3.1)"	No	WP5/Methodologies	-	<UNIMIB>	Must	97		DoW: p 9, 11	-
6	Methodologies usable by various organizations and individuals	Methodologies needs to be understandable and easy to follow for typical roles in OpenData publication, use and re-use: sysadmin, app. developer, ... ("people with IT background")	No	WP5/Methodologies	-	<UNIMIB>	Must	4,5	7	DoW: p 25	
176	General introductory parts of methodologies have to target general public.	"general parts are expected to be understandable also for the general public"	No	WP5/Methodologies	-	<UNIMIB>	Must	175		DoW: p 25	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
177	Produce Deliverable 5,1	"Methodology for publishing datasets as open data: methodology for publishers (mainly public bodies) about the steps and phases needed for publishing Open Data. It starts from the beginning of the publication activity ("what and why I must publish as open data?") to the result ("we have dataset suitable for publishing")"	No	WP5/Methodologies	-	<UNIMIB>	Must		36, 54, 55, 172	DoW: p 25	
36	Generic methodologies "describing how to publish Open Data"	"develop methodologies for deployment and use of the publication platform (ODN) and other tools for: data publishers allowing them to publish data quickly, with high quality and usable by 3rd parties"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	161, 177	163, 164, 165, 166, 167, 168, 233, 271	DoW: p 6, 24	
271	"Clear explanation of Open Data publishing process"	see section "Clear explanation of Open Data publishing process" in D2.1	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36	272	User Group (D2.1, page 39)	
272	"Publisher of the data remains owner of the data"	see section "Publisher of the data remains owner of the data" in D2.1	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	271	273	User Group (D2.1, page 39)	
160	Methodologies have to cover also usage of other tools as needed to achieve project goals	Methodologies have to cover also usage of other tools (other = not a COMSODE delivery) as needed to achieve project goals: "develop methodologies for deployment and use of the publication platform (ODN) and other tools for: ..."	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must			DoW: p 24	
163	Generic methodology includes answers to question "how to identify unique resources in the datasets"	Generic methodology includes answers to question "how to identify unique resources in the datasets"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36		DoW: p 24	
164	Generic methodology includes answers to question "how to reuse well known codebooks/ vocabularies/ ontologies"	Generic methodology includes answers to question "how to reuse well known codebooks/ vocabularies/ ontologies (currencies, NUTS codes, ..)"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36		DoW: p 24	
165	Generic methodology includes answers to question "in which formats the data should they are machine readable"	Generic methodology includes answers to question "in which formats the data should be published so that they are machine readable"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36		DoW: p 24	
166	Generic methodology includes answers to question "how the data should be transformed ... before being published"	Generic methodology includes answers to question "how the data should be transformed (e.g. anonymized) before being published"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36, 260		DoW: p 24	
167	Generic methodology includes answers to question "which descriptive and provenance metadata should be published together with the dataset"	Generic methodology includes answers to question "which descriptive and provenance metadata should be published together with the dataset (such as name, format, location/URL, source, responsible person)"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36		DoW: p 24	
168	Methodologies have to "propose a way to first clean and enhance the data "by hand" ... and then ways how to derive automated enhancement processes from that"	Methodologies have to "propose a way to first clean and enhance the data "by hand" (using tools like OpenRefine) and then ways how to derive automated enhancement processes from that "inconsistent and incomplete source data" can be "used for application development while avoiding high overhead for publishers (in terms of repeated manual cleaning and enhancement of the data) and risks for application developers (associated with usage of inconsistent, incomplete or outdated data)"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36, 236		DoW: p 24	
236	"Methodology has to stress the need for continual updates for already released data and has to put emphasis on doing it in automated way."	"Methodology has to stress the need for continual updates for already released data and has to put emphasis on doing it in automated way." + "Methodology covering specific usage of ODN has to give clear guidance and examples about how to use ODN for automated and repeatable publishing of data."	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	25, 168	237	User Group (D2.1, page 32)	
233	Methodology has to explain and give guidance on dataset license selection	"Methodology has to clearly explain that an integral part of Open Data publishing is the selection of appropriate open license for the data, together with the need to clearly communicate this license to all users of the data"	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	36, 234, 235		User Group (D2.1, page 31)	
235	"Methodology has to also ... give recommendation for use of particular licenses"	"Methodology has to also ... give recommendation for use of particular licenses (like ODbL or CC) based on EU-wide best practises and standards (which are being established right now)"	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Should		233	User Group (D2.1, page 31)	
173	Methodologies have to contribute to international standards and best practise	a.k.a. Task 5.3	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	180	174, 175	DoW: p 25	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
174	Methodologies have to fit into "context with international Open Data standards and best practices"	Methodologies have to fit into "context with international Open Data standards and best practices"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	173		DoW: p 25	
175	Methodologies have to contain "quick crash course about an even broader context, describing briefly what Open Data is and why it is important"	Methodologies have to contain "quick crash course about an even broader context, describing briefly what Open Data is and why it is important"	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	173, 270	176	DoW: p 25	
270	"Clear explanation of Open Data, the motivation and benefits"	see section "Clear explanation of Open Data, the motivation and benefits" in D2.1	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	175		User Group (D2.1, page 38)	
222	Methodologies have to help clarify what "Open Data ready" Information System means.	"The COMSODE project (implementation of the publication platform, methodologies and the pilot project) will help to clarify and test in practise what exact definition for "Open Data Ready" is needed, borrowing heavily from standards and techniques which will be part of methodologies delivered by the project."	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	221		DoW: p 49	
254	General "Binding guidance for government officials and clerks"	"We need to include in COMSODE Methodology as much guidance information, references to standards, best practises and (most importantly) references to relevant EU-wide legislation (PSI directive, etc.) as possible. In regards to PSI and related directives, we need to also stress mandatory requirements of this EU-wide legislation it places on various public bodies."	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	255		User Group (D2.1, page 34)	
255	Localized (to specifc countries) "Binding guidance for government officials and clerks"	"Add as much relevant country specific information as possible (reference to OGP plan, national standards for government Information Systems, etc.). And then convince national and municipal governments to adopt the Methodology (or at least parts of it) as official recommendations."	Yes	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Should		254	User Group (D2.1, page 34)	
180	Produce Deliverable 5.3	"first draft version" of Deliverable 5.5	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must	181	173	DoW: p 25	
181	Produce Deliverable 5.5	"Contribution to international standards and best practises: Supplemental documentation for D5.2 giving publishers (mainly public bodies) broader context about international Open Data standards and best practices. Documentation will be published on project website."	No	WP5/Methodologies	Methodologies/generic	<UNIMIB>	Must		180	DoW: p 25	
178	Produce Deliverable 5.2	"first draft version" of Deliverable 5.4	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		5	DoW: p 25	
179	Produce Deliverable 5.4	"Methodologies for deployment and usage of the COMSODE publication platform (ODN), tools and data: ... for publishers (mainly public bodies) wanting to publish their own data using COMSODE publication platform (ODN), tools and data"	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	195	5, 178	DoW: p 25	
5	Methodologies have to cover specific ODN usage: data publication	"methodologies for deployment and use of the publication platform (ODN) and other tools delivered by the project in real world conditions for data publishers allowing them to publish data quickly, with high quality and usable by 3rd parties" + "methodologies for deployment and usage of the COMSODE publication platform (ODN), tools and data" It should "smoothly" transition from general OpenData principles, processes, etc. into "and this is how you do it with ODN"). a.k.a. Task 5.2	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	178, 179	6, 7, 37, 41, 115, 119, 162, 169, 170, 171, 27, 277, 278, 279	DoW: p 1, 6, 24	
277	Methodology has to provide per type of ODN user a dedicated initial introduction optimized just for this king od user	"Every ODN user, coming from any environment (and public bodies in particular) has a document dedicated for his/her needs"	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5, 278		User Group (D2.1, page 40)	
278	Initial intro. part of Methodology has to provide good "First impression" using proper scheme	"First scheme in such document has to be sufficiently clear and informative for this particular kind of user"	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5	277	User Group (D2.1, page 40)	
279	Methodology has to clearly document benefits of ODN to data publishers, especially thos from public bodies	see section "What are the benefits for me?" in D2.1	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5		User Group (D2.1, page 40)	
214	Methodologies have to cover ODN installation and maintenance	"provide clear guidelines for the installation and maintenance of the platform"	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		205	DoW: p 47	
8	Methodologies provide reasons to use ODN for OpenData publication and re-use	Methodologies should give reationale for why ODN should be chosen for OpenData publishing and re-use - to executives, sysadmins, developers	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Should	5			
15	Methodologies "provide guidance for 3rd party developers about how to implement applications using the COMSODE components and tools (ODN, etc.)"	"develop methodologies for deployment and use of the publication platform (ODN) and other tools for: 3rd party application developers about data, APIs and tools delivered as part of this project" Relevant support and documentation will be part of ODN but Methodologies have to link.mention that too.	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		12,17	DoW: p 6, 24	

req. ID	requirement name	requirement description	public?	module	submodule	owner	priority	related req. ID	dependencies (req. ID)	source	deliverable
16	Methodologies have to cover topic of ODN as integration platform	Relevant support and documentation will be part of ODN but Methodologies have to link.mention that too.	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Should		13		
17	Methodologies have to cover creation of applications using ODN citing/linking proof-of-concept applications	Relevant support and documentation will be part of ODN but Methodologies have to link.mention that too.	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Should	15	14		
24	Methodologies should mention Open Source aspects of the ODN	Relevant support and documentation will be part of ODN but Methodologies have to link/mention that too.	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Should				
34	Methodologies have to mention the review and audit tools for the data	Relevant support and documentation will be part of ODN but Methodologies have to link.mention that too.	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Should	33			
94	Methodologies have to give guidance about decentralized publishing	Methodologies have to provide guidance about how to setup "decentralized publishing so the data can be published close to the original source" using ODN and other tools	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		93	DoW: p 10	
169	ODN methodologies have to be developed based on map of current state and the needs of future users of ODN	"The task will map the state (where they are) and needs (where they want to be) in regards to publishing of Open Data (taking into account also output from tasks 2.1, 3.2, 3.3. and 3.4 and other feedback from User Group) and will produce documentation which will allow users of the COMSODE software components not just to install and run the platform but also to build on top of it and publish their own datasets."	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5, 7		DoW: p 24	
170	Methodologies have to target future ODN users who "are expected to be common members of usual departments or work groups of public organizations or companies"	Methodologies have to target future ODN users who "are expected to be common members of usual departments or work groups of public organizations or companies (IT support staff without advanced programming skills, data publishers or data users with main expertise and responsibilities other than Semantic Web, Open Data, etc.)"	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5		DoW: p 24	
171	ODN methodologies will extend generic methodologies	This documentation will build on top of D5.1	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5		DoW: p 24	
161	ODN methodologies "describing how to publish Open Data"	"develop methodologies for deployment and use of the publication platform (ODN) and other tools for: data publishers allowing them to publish data quickly, with high quality and usable by 3rd parties"	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		36	DoW: p 6, 24	
162	ODN methodologies "for providing APIs for open datasets ..."	ODN methodologies "for providing APIs for open datasets, advice and examples for development tools needed along with published Open Data for seamless adoption by 3rd party application developers"	No	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	5		DoW: p 6, 24	
234	ODN Methodology has to describe how to manage dataset license information	ODN Methodology has to describe how to manage dataset license information	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		232, 233	User Group (D2.1, page 31)	
274	"Methodology has to explain why and how to manage ownership information both in general terms and with ODN in particular."	"Methodology has to explain why and how to manage ownership information both in general terms and with ODN in particular."	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must		273	User Group (D2.1, page 39)	
260	"ODN documentation and Methodologies have to give clear guidance about how to use those features"	"ODN documentation and Methodologies have to give clear guidance about how to use those features"	Yes	WP5/Methodologies	Methodologies/ODN	<UNIMIB>	Must	166	256	User Group (D2.1, page 34)	