



EMODnet Coastal Mapping Project

Tender no MARE/2014/10

Contract Number no
EASME/EMFF/2014/1.3.1.4/SI2.708188

Bi-monthly Report

Reporting Period: 26/04/2016 – 25/06/2016

Date: 08/07/2016

1. Highlights in this reporting period

Provide a summary of the key achievements and noteworthy progress within this reporting period.

These two months were mainly devoted to the continuous improvement of the portal including the implementation of the algorithm designed to help the coastal survey planning and to the collection of consistent inputs from WP2 and WP3 tasks in order to prepare recommendations for the future.

The first versions of the portal and of the project website were opened to the public on 23 December 2015 with some datasets. The data initialization has continued ever since with a portal now giving access to several datasets grouped in four thematics (see Annex 1). Moreover, the algorithm indicating the optimal survey techniques to obtain the main coastal mapping products is now available on the portal (Tools Menu). This textual version asks for the minimum/maximum depths and Secchi disk value of the area of interest and for the type of expected products. It issues recommendations on the suitability of three potential technologies for the survey (lidar, multibeam echosounder and hyperspectral). Other functionalities were also implemented during this period (WCS for downloading some datasets, in particular).

The analysis of the questionnaire linked to the vertical datum was completed and the inventories of the used vertical references, of the available transformations and of the current developments (national initiatives) were established. The analysis of INSPIRE requirements and of the differences met in adjacent datasets is in progress. The full results of this task will be included in the final report.

The results of the past experiences questionnaire highlighted some points of criticism: some areas were not investigated, the results are biased by the fact that the partners are mainly Hydrographic Offices and by the complexity of gathering information about the cost of the different survey technologies. In order to go further, the questionnaire is maintained online and accessible directly from the portal. It is promoted by the project team at every possible opportunity.

The algorithm upgrading is still in a phase of experimental development to add more functions. The publication of the “geographical” version of the algorithm on the Coastal Mapping portal is in progress and will use modelisations of depth and Secchi disk values on the European seas.

The task “Sharing platforms” is now focusing on cross border collaboration to assure efficiency and consistency, as well as the possibility of combining small survey operations into bigger ones, resulting in effective cost saving.

The analysis of the survey concerning economic models and governance of data is finished and the results will be included in the final report.

The analysis of the current EU fundings opportunities and of the regions' strategies is still in progress. Two maps (transnational programmes and cross-border programmes) were created to show the opportunities for coastal mapping. A report will be produced as a result of the analysis and will be included in the final report.

The coordinator participated in the 6th EMODnet Steering Committee (21-22 June).

2. Specific challenges or difficulties encountered during the reporting period

Please list specific problems you have encountered during this period, including related to technical and data provision issues

The results of the past experiences questionnaire highlighted some points of criticism (see §1).

The Coastal Mapping Planner is a fully functional algorithm that gives indications on the suitability of the more common acquisition technologies to acquire coastal mapping products in various environmental boundary conditions. Moreover, the cost of the survey is an important parameter to be considered but is also very difficult to assess. For this purpose, during the last period, a working group was set up to define the cost function of several acquisition technologies and the task is still in progress.

The production of recommendations as a result of WP3 tasks needs to gather all the inputs from WP2 and WP3 tasks. Some types of needed information are difficult to assess and to aggregate in a consistent way within the duration of the project. The project team will be challenged during the next 6-month period in order to produce these recommendations.

3. Meetings held since last report [if any]

List here the meetings held/participated since the last bi-monthly report, if relevant add short description

Date	Location	Topic	Short Description
28/04/2016	Roma (Italy)	BC Coord. Board	[external] Bologna Charter Coordination Board meeting
7-8/06/2016	Stockholm (SW)	Progress meeting	[internal] Progress meeting.
21-22/06/2016	Brussels (BE)	Steering Committee	[external] 6 th EMODnet Steering Committee meeting

4. User Feedback [if any]

List any useful feedback you received on your activities and/or your portal or those of other EMODnet projects/activities. Also provide any suggestions you have received for EMODnet case studies and/or future products/activities/events.

Date	Name	Organization	Type of user feedback	Response time to address user request

Nothing to report.

5. Outreach and communication activities [if any]

Please list all the relevant communications activities or products you have developed/executed during this period (including presentations, lectures, trainings, demonstrations and development of communication materials such as brochures, videos, etc.). Relevant scientific and/or popular articles you know have been published using/referring to EMODnet should be reported under indicator 11 in Section 7.

Date	Media	Title	Short description and/or link to the activity
25/05/2016	Presentation	Towards a standardized European vertical datum	Presentation at the EUREF 2016 symposium.

6. User statistics

Please provide as much information about the usage of your portal as possible once it is operational (page visits, downloads, etc.).

The only statistics refer to the users' visits of the website (see Annex 3).

6.1. Website global statistics

The statistics are more detailed in Annex 3.

Period	Unique visitors	Number of visits	Pages
26/04/16-25/06/16	606	869	1572

Country	Sessions	Pages/session
France	295	1.75
United Kingdom	103	1.25
Belgium	62	2.24
Sweden	59	2.54
Italy	53	1.96
United States	44	1.02
Spain	40	2.05
(not set)	27	1.00
Norway	24	2.00
Greece	20	1.30

Service Provider	Sessions	Pages/session
service hydrographique et oceanographique de la marine	162	1.54
worldline france hosting	76	2.25
national maritime administration	53	2.62
(not set)	45	1.42
istituto superiore per la protezione e la ricerca ambientale	22	1.50
flanders marine institute	18	2.06
statens kartverk	16	1.94
orange	15	1.67
vlaamse overheid	15	2.60
commission europeenne	10	2.50

Annex 1: Datasets available through the portal

The Web Feature and Web Coverage Services were set up at the end of the period, so there are no relevant statistics reported here.

These datasets are grouped in four categories: Coastline-Baseline, Topography&Bathymetry, Imagery and Additional Layers ([new ones in blue](#)).

COASTLINE – BASELINE (9 datasets):

Name/Type of data	Area of interest	Provider
HIGHEST ASTRONOMICAL TIDE LEVEL		
France, Histolitt coastline	France	SHOM
INTERTIDAL AREA		
Belgium Coastline	Belgium	MDK
Ireland Coastline	Ireland	GSI
Romania Coastline 1970	Romania	DDNI
LEGAL BASELINE		
Belgium Legal Baseline	Belgium	MDK
Greece Coastline	Greece	HNHS
Portugal Coastline	Portugal	IHPT
Romania Coastaline	Romania	DDNI
MEAN SEA LEVEL		
Sweden Coastline	Sweden	Lantmäteriet ¹

¹ : Swedish mapping, cadastral and land registration authority

TOPOGRAPHY & BATHYMETRY (30 datasets):

Name/Type of data	Area of interest	Provider
EMODNET BATHYMETRY DTM		
Greece DTM	Greece	HNHS
HIGH RESOLUTION DTM		
Belgium Single Beam	Belgium	MDK
France 10m DTM – Boulogne-sur-Mer	France	SHOM
France 20m DTM - Morbihan	France	SHOM
France 20m DTM – Pertuis Charentais	France	SHOM
Germany 1m DTM	Germany	BSH

Greece DTM 90K	Greece	HNHS
Norway 10m DTM	Norway	NMA
Romania 5m DTM	Romania	DDNI
LAND-SEA SEAMLESS DTM		
Belgium Lidar	Belgium	MDK
France Coastal DTM – Finistère 2014	France	SHOM
France Coastal DTM – Languedoc-Roussillon 2009	France	SHOM
France Coastal DTM – PACA 2015	France	SHOM
Germany 50m DTM	Germany	BSH
INFOMAR INSS 30m Bathymetry and LIDAR	Ireland	GSI
Ireland 20m Bathy & LIDAR Image	Ireland	GSI
Ireland Aerial LIDAR	Bantry/Dunmanus (IRL)	GSI
Ireland Bantry 5m Bathy & LIDAR DTM	Bantry/Dunmanus (IRL)	GSI
Ireland Bantry Bathy & LIDAR 8m Image	Bantry/Dunmanus (IRL)	GSI
Ireland Coastal DTM MNT	Bantry/Dunmanus (IRL)	GSI
Ireland Donegal 30m Bathy & LIDAR Image	Donegal (IRL)	GSI
Portugal DTM	Portugal	IHPT
Romania 500M DTM 1970	Romania	DDNI
LOW RESOLUTION BATHYMETRY DTM		
Baltic Sea, BSDB Bathymetry elevations 500m median	Baltic Sea	BSHC
Baltic Sea, BSDB Bathymetry watercolour 500m median	Baltic Sea	BSHC
Baltic Sea, BSDB Bathymetry watershade 500m median	Baltic Sea	BSHC
Sweden, Bathymetry 500m Min-depth	Sweden	SMA
MEDIUM RESOLUTION DTM		
France 100m DTM – Atlantic coast	France	SHOM
France 100m DTM - Corse	France	SHOM
France 100m DTM – Lion Gulf / Côte d’Azur	France	SHOM

IMAGERY (4 datasets):

Name/Type of data	Area of interest	Provider
AERIAL PHOTOGRAPHY		
France Coastal Imagery	France	SHOM
Ireland Bantry 5m Aerial Lidar Image	Bantry (IRL)	GSI
Ireland Dunmanus 3m Aerial Lidar Image	Dunmanus (IRL)	GSI
Ireland Coastal DTM	Bantry/Dunmanus (IRL)	GSI

ADDITIONAL LAYERS (12 datasets):

Name/Type of data	Area of interest	Provider
BACKSCATTERS		
Ireland 10m Backscatter Image	Bantry/Dunmanus (IRL)	GSI
BASEMAPS		
GEBCO 2014	Europe	GEBCO
Secchi Disk Depth statistics	Europe	COPERNICUS
DATA QUALITY AND SURVEY PLANS		
Sweden, Surveys fulfilling the National realization of S44	Sweden	SMA
Sweden, Surveys performed after 1940	Sweden	SMA
HABITATS MAPPING		
Italy Dune Cover	Italy	ISPRA
SEABED COVER		
Italy Bottom Type	Italy	ISPRA
Italy Seabed Cover	Italy	ISPRA
SEDIMENTS MAPPING		
Ireland Bantry 10m Seabed Classification	Bantry/Dunmanus (IRL)	GSI
Ireland INFOMAR Samples PSA	Ireland	GSI
Ireland Non INFOMAR Samples PSA	Ireland	GSI
Ireland Samples	Ireland	GSI

Annex 2: User feedback

Nothing to report.

Annex 3: Global website statistics

Period	Users	Sessions	Pageviews	Pages/session	Avg session duration
26/04/16-24/06/16	606	869	1572	1.81	00:02:11

Country	Sessions	Pageviews	Pages/session	Avg session duration
France	295	515	1.75	0:02:42
United Kingdom	103	129	1.25	0:00:17
Belgium	62	139	2.24	0:03:01
Sweden	59	150	2.54	0:05:12
Italy	53	104	1.96	0:01:27
United States	44	45	1.02	0:00:01
Spain	40	82	2.05	0:02:26
(not set)	27	27	1.00	0:00:00
Norway	24	48	2.00	0:02:56
Greece	20	26	1.30	0:01:57
Romania	17	39	2.29	0:02:25
Germany	16	30	1.88	0:01:03
Portugal	14	35	2.50	0:03:03
Netherlands	9	24	2.67	0:06:06
Ireland	8	14	1.75	0:00:10
China	7	7	1.00	0:00:00
Finland	7	10	1.43	0:00:04
Latvia	5	47	9.40	0:12:09
Australia	4	18	4.50	0:07:27
Brazil	4	4	1.00	0:00:00
Iceland	4	5	1.25	0:00:07
Russia	4	4	1.00	0:00:00
Denmark	3	10	3.33	0:01:23
Japan	3	3	1.00	0:00:00
South Korea	3	3	1.00	0:00:00

Luxembourg	3	12	4.00	0:02:29
Poland	3	3	1.00	0:00:00
Austria	2	2	1.00	0:00:00
Canada	2	2	1.00	0:00:00
Chile	2	2	1.00	0:00:00
Egypt	2	2	1.00	0:00:00
Croatia	2	4	2.00	0:02:56
Monaco	2	6	3.00	0:06:40
Turkey	2	3	1.50	0:03:45
Algeria	1	2	2.00	0:06:26
Faroe Islands	1	1	1.00	0:00:00
Indonesia	1	1	1.00	0:00:00
Lithuania	1	1	1.00	0:00:00
Morocco	1	1	1.00	0:00:00
Mexico	1	1	1.00	0:00:00
New Zealand	1	2	2.00	0:01:20
Philippines	1	1	1.00	0:00:00
Saudi Arabia	1	1	1.00	0:00:00
Taiwan	1	1	1.00	0:00:00
Ukraine	1	3	3.00	0:01:16
Uruguay	1	1	1.00	0:00:00
Venezuela	1	1	1.00	0:00:00
South Africa	1	1	1.00	0:00:00

Service Provider	Sessions	Pageviews	Pages/session	Avg session duration
service hydrographique et oceanographique de la marine	43	90	2.09	0:03:00
istituto superiore per la protezione e la ricerca ambientale	35	100	2.86	0:06:14
(not set)	25	44	1.76	0:00:39
statens kartverk	16	38	2.38	0:02:27
atos worldline ipv4 subnet	11	18	1.64	0:01:17
flanders marine institute	11	44	4.00	0:03:33
commission europeenne	10	27	2.70	0:05:19

nos comunicacoes s.a.	8	13	1.63	0:03:44
dceur public facing services	7	22	3.14	0:00:33
digital ocean inc.	6	6	1.00	0:00:00
institut francais de recherche pour l exploitation de la mer - i	6	9	1.50	0:00:23
orange	6	7	1.17	0:00:03
proxad / free sas	6	12	2.00	0:02:10
telecom italia s.p.a. tin easy lite	6	17	2.83	0:02:39
voxility.net	6	6	1.00	0:00:00
bundesamt fuer seeschiffahrt und hydrographie	5	9	1.80	0:00:33
information society s.a.	5	6	1.20	0:00:10
instituto tecnologico geominero de espan~a	5	9	1.80	0:00:27
wind telecomunicazioni s.p.a	5	12	2.40	0:02:04
worldline france hosting	5	14	2.80	0:01:30
bsren650 rennes bloc 2	4	6	1.50	0:00:36
cjsc er-telecom company samara	4	5	1.25	0:00:48
comcast cable communications inc.	4	13	3.25	0:01:01
commission of the european communities	4	8	2.00	0:03:17
infra	4	7	1.75	0:02:40
infrastructure for fastwebs main location	4	5	1.25	0:00:13
psi line srl	4	15	3.75	0:04:20
telecom italia s.p.a.	4	16	4.00	0:06:04
telefonica de espana sau	4	7	1.75	0:00:29
university college cork	4	10	2.50	0:00:59
bluet di robotti diego public subnet	3	3	1.00	0:00:00
consiglio nazionale delle ricerche	3	3	1.00	0:00:00
direction interministerielle des systemes d information et de co	3	5	1.67	0:01:22
dynamic pools	3	4	1.33	0:00:13
empresa de transformacion agraria s.a.	3	16	5.33	0:01:43
end-user numericable	3	4	1.33	0:00:05
gp systems riga	3	7	2.33	0:01:04

institut géographique national	3	12	4.00	0:09:34
instituto hidrografico da marinha	3	5	1.67	0:00:29
liguria digitale s.c.p.a.	3	13	4.33	0:01:32
lyse tele corporate customer linknets	3	4	1.33	0:01:03
national maritime administration	3	9	3.00	0:00:39
pool for broadband dsl customers	3	7	2.33	0:00:59
the university of plymouth	3	5	1.67	0:00:07
universidade dos acores	3	8	2.67	0:03:02
universite pierre et marie curie	3	5	1.67	0:00:19
university of the aegean	3	4	1.33	0:00:28
vlaamse overheid	3	3	1.00	0:00:00
_____	2	2	1.00	0:00:00
2 rue francois verny	2	5	2.50	0:04:06
adsl ull south cluster #6	2	3	1.50	0:07:10
adsl-go-plus	2	2	1.00	0:00:00
agency aarniec - roedunet bucharest	2	7	3.50	0:01:34
alvares public subnet	2	12	6.00	0:05:15
amazon.com inc.	2	4	2.00	0:00:30
at&t internet services	2	2	1.00	0:00:00
athens	2	2	1.00	0:00:00
bouygues telecom sa	2	9	4.50	0:01:23
bsaub653 aubervilliers bloc 2	2	8	4.00	0:03:52
bsnic652 nice bloc 2	2	7	3.50	0:02:41
bsren652 rennes bloc 2	2	2	1.00	0:00:00
bstou555 toulouse bloc 2	2	5	2.50	0:00:42
cjsc company er-telecom samara	2	2	1.00	0:00:00
cjsc er-telecom holding samara branch	2	2	1.00	0:00:00
cogea s.r.l.	2	3	1.50	0:00:10
cranfield university	2	2	1.00	0:00:00
customer nets	2	5	2.50	0:01:28
fastwb staff public subnet	2	5	2.50	0:11:23
institut de radioprotection et de surete nucleaire	2	3	1.50	0:00:58
ip addresses allocated to dsl	2	8	4.00	0:00:51

customers				
ip range for wholesale customers	2	6	3.00	0:02:43
junta de andalucia	2	4	2.00	0:02:02
lancom-ath	2	2	1.00	0:00:00
ministerie van verkeer en waterstaat/rijkswaterstaat	2	5	2.50	0:02:41
ministerio de defensa	2	2	1.00	0:00:00
multiprotocol service provider to other isp s and end users	2	7	3.50	0:05:40
norsk institutt for vannforskning	2	3	1.50	0:00:08
ote sa (hellenic telecommunications organisation)	2	6	3.00	0:06:41
pool for mobile data users	2	2	1.00	0:00:00
routit	2	5	2.50	0:01:11
services platform	2	9	4.50	0:02:41
stichting deltares	2	14	7.00	0:06:22
tenet networking centre	2	2	1.00	0:00:00
tim	2	3	1.50	0:02:30
umts company	2	3	1.50	0:00:10
universitaet hamburg campus net	2	2	1.00	0:00:00
universitat de les illes balears	2	14	7.00	0:02:23
university of las palmas de gran canaria	2	3	1.50	0:00:14
1&1 internet ag	1	3	3.00	0:12:20
754th electronic systems group	1	1	1.00	0:00:00
adsl	1	1	1.00	0:00:00
adsl dynamic pool	1	3	3.00	0:00:29
adsl maroc telecom	1	4	4.00	0:02:08
alfred-wegener-institut helmholtz- zentrum fuer polar- und meere	1	1	1.00	0:00:00
amazon connection technology services (beijing) co. ltd	1	1	1.00	0:00:00
amazon technologies inc.	1	1	1.00	0:00:00
asta-net pila poland	1	1	1.00	0:00:00
auckland university of technology network	1	1	1.00	0:00:00
auna	1	1	1.00	0:00:00

be-colt-ip-access-flat-rate-eosdh-unmanaged	1	1	1.00	0:00:00
bouygues telecom division mobile	1	1	1.00	0:00:00
bretagne telecom sas	1	1	1.00	0:00:00
brgm	1	1	1.00	0:00:00
broadband pool	1	2	2.00	0:00:22
bsaub652 aubervilliers bloc2	1	1	1.00	0:00:00
bsbor258 bordeaux bloc 2	1	1	1.00	0:00:00
bscle652 clermont bloc 1	1	1	1.00	0:00:00
bsdij158 dijon bloc 1	1	2	2.00	0:01:34
bsdij651 dijon bloc 1	1	1	1.00	0:00:00
bsdij653 dijon bloc 1	1	5	5.00	0:02:57
bsdij654 dijon bloc 1	1	1	1.00	0:00:00
bsdij656 dijon bloc 2	1	1	1.00	0:00:00
bsmso156 montsouris bloc 2	1	3	3.00	0:03:29
bsncy654 nancy bloc 1	1	1	1.00	0:00:00
bsnic653 nice bloc 2	1	5	5.00	0:02:45
bsren256 rennes bloc 2	1	1	1.00	0:00:00
bsren651 rennes bloc 2	1	1	1.00	0:00:00
bsren654 rennes bloc 1	1	1	1.00	0:00:00
bsren656 rennes bloc 2	1	2	2.00	0:02:01
bsstl152 st lambert bloc1	1	1	1.00	0:00:00
bstln651 toulon bloc 1	1	1	1.00	0:00:00
bstou655 toulouse bloc 1	1	1	1.00	0:00:00
bstou658 toulouse bloc 2	1	1	1.00	0:00:00
canniesburn	1	4	4.00	0:00:30
cegedim s.a.	1	6	6.00	0:01:42
celeste	1	3	3.00	0:10:34
cerege	1	1	1.00	0:00:00
chinanet anhui province network	1	1	1.00	0:00:00
chinanet sichuan province network	1	1	1.00	0:00:00
chinanet xizang province network	1	1	1.00	0:00:00
chinanet zhejiang province network	1	1	1.00	0:00:00
commune de paris	1	2	2.00	0:00:57
comptel sas france	1	1	1.00	0:00:00
computer sciences corporation	1	1	1.00	0:00:00

cosmote romanian mobile telecommunications s.a	1	2	2.00	0:00:37
crawley	1	2	2.00	0:01:55
credit suisse group / cana	1	1	1.00	0:00:00
custodian ltd.	1	1	1.00	0:00:00
d6926-00010-001	1	1	1.00	0:00:00
daisy communications ltd	1	1	1.00	0:00:00
deutsche telekom ag	1	1	1.00	0:00:00
deutscher wetterdienst	1	1	1.00	0:00:00
dynamic-ip-addresses-bras2	1	1	1.00	0:00:00
elisa oyj	1	1	1.00	0:00:00
faculty of sciences university of lisbon	1	5	5.00	0:15:51
free sas	1	1	1.00	0:00:00
ftip003376287 heriot watt university	1	3	3.00	0:00:29
genentech inc.	1	1	1.00	0:00:00
global telecommunication service provider	1	1	1.00	0:00:00
greek academic & research computer network	1	1	1.00	0:00:00
greek research and technology network s.a	1	1	1.00	0:00:00
hanaro telecom inc.	1	1	1.00	0:00:00
hellas on line sa - dsl	1	9	9.00	0:01:45
het kadaster en de openbare registers	1	13	13.00	0:05:53
hogeschool rotterdam & omstreken	1	2	2.00	0:15:58
hrvatski prirodoslovni muzej	1	2	2.00	0:12:05
hutchison 3g ireland ltd.	1	2	2.00	0:00:23
incubateur-ntic	1	1	1.00	0:00:00
institut de recherche pour le developpement	1	1	1.00	0:00:00
institut national de la recherche agronomique	1	1	1.00	0:00:00
instituto de investigacao	1	2	2.00	0:00:21

instituto espanol de oceanografia	1	1	1.00	0:00:00
ip addresses assigned for dsl customers	1	9	9.00	0:10:42
ip addresses assigned for vf customers	1	1	1.00	0:00:00
ip addresses assigned to dsl customers	1	2	2.00	0:00:15
ip addresses assigned to vf customers	1	2	2.00	0:07:25
ip range assigned to vf-it customers	1	2	2.00	0:00:32
itnet s.r.l.	1	1	1.00	0:00:00
jazztel triple play services	1	17	17.00	0:20:11
johann heinrich von thuenen-institut (vti)	1	1	1.00	0:00:00
karpinskogo-lan	1	4	4.00	0:27:19
lait public subnet	1	2	2.00	0:08:55
lcv corporation	1	1	1.00	0:00:00
level 3 communications inc.	1	1	1.00	0:00:00
lighthouse group public subnet	1	1	1.00	0:00:00
lirex net	1	1	1.00	0:00:00
lnmso656 montsouris bloc 1	1	2	2.00	0:02:42
lnmso657 montsouris bloc 1	1	2	2.00	0:00:13
matrix international sarl	1	1	1.00	0:00:00
max-planck-institut fuer radioastronomie bonn	1	1	1.00	0:00:00
metronet telekomunikacije d.d.	1	3	3.00	0:00:43
mettler-toledo inc.	1	1	1.00	0:00:00
mia adsl eeua	1	1	1.00	0:00:00
mobile live service	1	1	1.00	0:00:00
monaco-telecom	1	2	2.00	0:00:19
nas dhcp pool bologna	1	3	3.00	0:00:24
nas dhcp pool palermo	1	1	1.00	0:00:00
nato sto-cmre	1	1	1.00	0:00:00
network for providing colocation services	1	1	1.00	0:00:00
northern ireland civil service	1	1	1.00	0:00:00

norwegian central governmental offices	1	1	1.00	0:00:00
nos madeira comunicacoes s.a	1	1	1.00	0:00:00
ntt communications corporation	1	1	1.00	0:00:00
obs customer	1	1	1.00	0:00:00
ono	1	1	1.00	0:00:00
opal telecom dsl	1	1	1.00	0:00:00
oracle france sa	1	1	1.00	0:00:00
orange mobile	1	2	2.00	0:00:41
ouk broadband ip stream	1	2	2.00	0:05:13
oxford university	1	1	1.00	0:00:00
pat/nat ip addresses pop 0504 for	1	6	6.00	0:05:10
place de la lib ration charles de gaulle	1	5	5.00	0:19:13
pool for broadband customers on dslam ver73-1	1	1	1.00	0:00:00
pool for broadband ftth customers	1	2	2.00	0:03:58
pools for adsl customers	1	1	1.00	0:00:00
pop puteaux	1	1	1.00	0:00:00
pop rennes	1	3	3.00	0:00:47
pprivbanklon public guest access	1	2	2.00	0:00:46
primetel	1	2	2.00	0:05:16
princeton university	1	1	1.00	0:00:00
prostream servers range	1	1	1.00	0:00:00
provider	1	1	1.00	0:00:00
proximus mobile internet	1	1	1.00	0:00:00
rabat_3g_maroctelecom	1	1	1.00	0:00:00
rcs & rds business	1	11	11.00	0:03:27
red de supercomputacion de galicia	1	3	3.00	0:03:56
red del instituto espanol de oceanografia en	1	3	3.00	0:00:40
regione toscana	1	1	1.00	0:00:00
reseau canope	1	1	1.00	0:00:00
reseau des lycees de bourgogne	1	1	1.00	0:00:00
romtelecom data network	1	1	1.00	0:00:00
ruby capital	1	1	1.00	0:00:00

service provider corporation	1	1	1.00	0:00:00
services du premier ministre	1	7	7.00	0:03:49
shaw communications inc.	1	1	1.00	0:00:00
shepshed	1	1	1.00	0:00:00
skov og naturstyrelsen	1	3	3.00	0:05:56
sncf dsp-si	1	1	1.00	0:00:00
sociedad andaluza para el desarrollo de las telecomunicaciones s	1	6	6.00	0:02:11
sodertorns hogskola	1	1	1.00	0:00:00
static ip	1	2	2.00	0:00:23
stockholm university	1	2	2.00	0:00:28
te data	1	2	2.00	0:03:48
tecteo	1	1	1.00	0:00:00
telecom italia s.p.a	1	1	1.00	0:00:00
telecom italia spa	1	4	4.00	0:00:23
telefonica germany gmbh & co.ohg	1	1	1.00	0:00:00
tellas s.a.	1	7	7.00	0:10:49
test	1	1	1.00	0:00:00
the bloomsbury computing consortium	1	2	2.00	0:00:24
topnet adsl light	1	2	2.00	0:03:03
tot public company limited bangkok	1	1	1.00	0:00:00
tov trk briz	1	1	1.00	0:00:00
universidad de cantabria	1	2	2.00	0:00:20
universita degli studi di bari	1	2	2.00	0:01:27
universita degli studi di roma la sapienza	1	1	1.00	0:00:00
universita iuav di venezia	1	2	2.00	0:11:19
universitaet bremen	1	1	1.00	0:00:00
university of exeter	1	5	5.00	0:01:01
university of newcastle upon tyne	1	2	2.00	0:00:34
university of oslo	1	1	1.00	0:00:00
university of southampton	1	1	1.00	0:00:00
university of tromso	1	1	1.00	0:00:00
university of wales bangor	1	2	2.00	0:02:22

university of wisconsin - stout	1	1	1.00	0:00:00
valueps	1	1	1.00	0:00:00
verizon online llc	1	1	1.00	0:00:00
vodafone d2 gmbh	1	1	1.00	0:00:00
vodafone malta mobile broadband	1	4	4.00	0:00:18
vodafone nl infrastructure	1	1	1.00	0:00:00
voip customers nl	1	4	4.00	0:05:23
welsh government	1	1	1.00	0:00:00
xfera moviles sa / yoigo	1	1	1.00	0:00:00
yildiz university computer center	1	2	2.00	0:03:43