



2nd workshop **Preparations for Sentinel-2 in Europe**

Oslo, October 11th and 12th 2016

EuroSDR



EuroSDR- a pan-European network of GI production and research organisations from eighteen countries.

A **rolling research plan**, that is being reviewed every three years, addresses the research needs of core spatial data provision, management and delivery.

It is realised through timely applied international collaborative **research projects**, focussed **workshops** and specialist **taskforces**.



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Program committee

- Sebastien Giordano, IGN France
- Guro Dahle Strøm, Norwegian Space centre
- Vigdis Lonar Barth, Norwegian Space centre
- Line Langkaas, Kartverket, Norway
- Jon Arne Trollvik, Kartverket Norway



	Day 1 October 11 th
11:30 – 12:30	Registration and lunch
12:30 – 12:40	Welcome address.
12:40 – 13:10	Sentinel-2: mission status, data access and outlook. <i>Bianca Hoersch, European Space Agency (ESA)</i>
13:10 – 13:40	Sentinel-2: products, data quality and evolution. <i>Ferran Gascon, ESA</i>
13:40 – 14:10	From rapid development to operational processing: Sentinel data user's support provided by ESA's SNAP. <i>Carsten Brockmann, Brockmann consult, Germany</i>
14:10 – 14:30	Coffee break
14:30 – 15:00	The French Theia Land data center products, based on Sentinel-2 data: cloud masks, atmospheric correction, snow cover and land cover maps at country scale. <i>Olivier Hagolle, CESBIO, France</i>
15:00 – 15:30	Status of the Earth Observation Data Centre (EODC) services. <i>Christian Briese, EODC, Austria</i>
15:30 – 16:00	Status of preparations for the Sentinels in Sweden. Validation and applications of data from Sentinel-2. <i>Mats Rosengren, Metria, Sweden</i>
16:00 – 16:30	Norwegian preparations for the National Ground Segment. <i>Anja Strømme, Norwegian Space Centre (NSC), Norway</i>
16:30 – 16:45	Coffee break
16:45 – 17:15	Improved crop map production by joint use of Sentinel-1 and Sentinel-2 images time series. Olivier Hagolle CESBIO, France will present Jordi Inglada's work
17:15 – 17:30	Wrap up and practical information day 1 – Input to break out session from the audience
18:00	Open for drinks (optional)



Day 2, October 12 th	
08:45 – 09:00	Coffee
09:00 – 09:15	Introduction day 2 Topics to be discussed in groups (decided after the meeting day 1)
09:15 – 10:30	Break out session
10:30 – 10:45	Coffee break
10:45 – 11:45	Presentation of outcome from the groups
11:45 – 12:00	Wrap up, conclusions and close of workshop
12:00 – 13:00	Lunch



Breakout session

We will separate into 5 groups

The groups

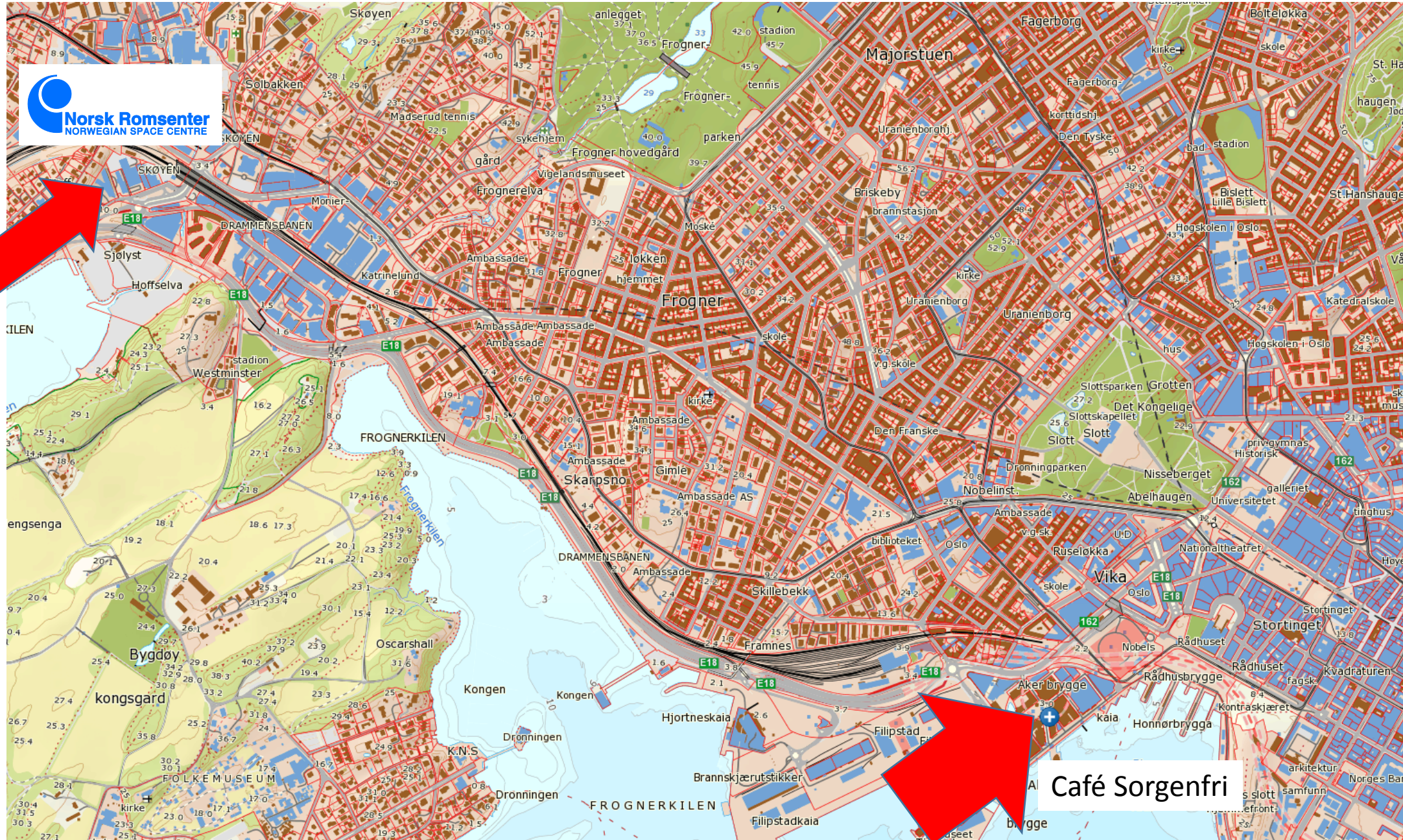
Group 1: National Mapping Agencies

Group 2: Collaborative Ground Segment

Group 3: Toolboxes and training

Group 4: Users/End Users Requirements

Group 5: Research and new algorithms

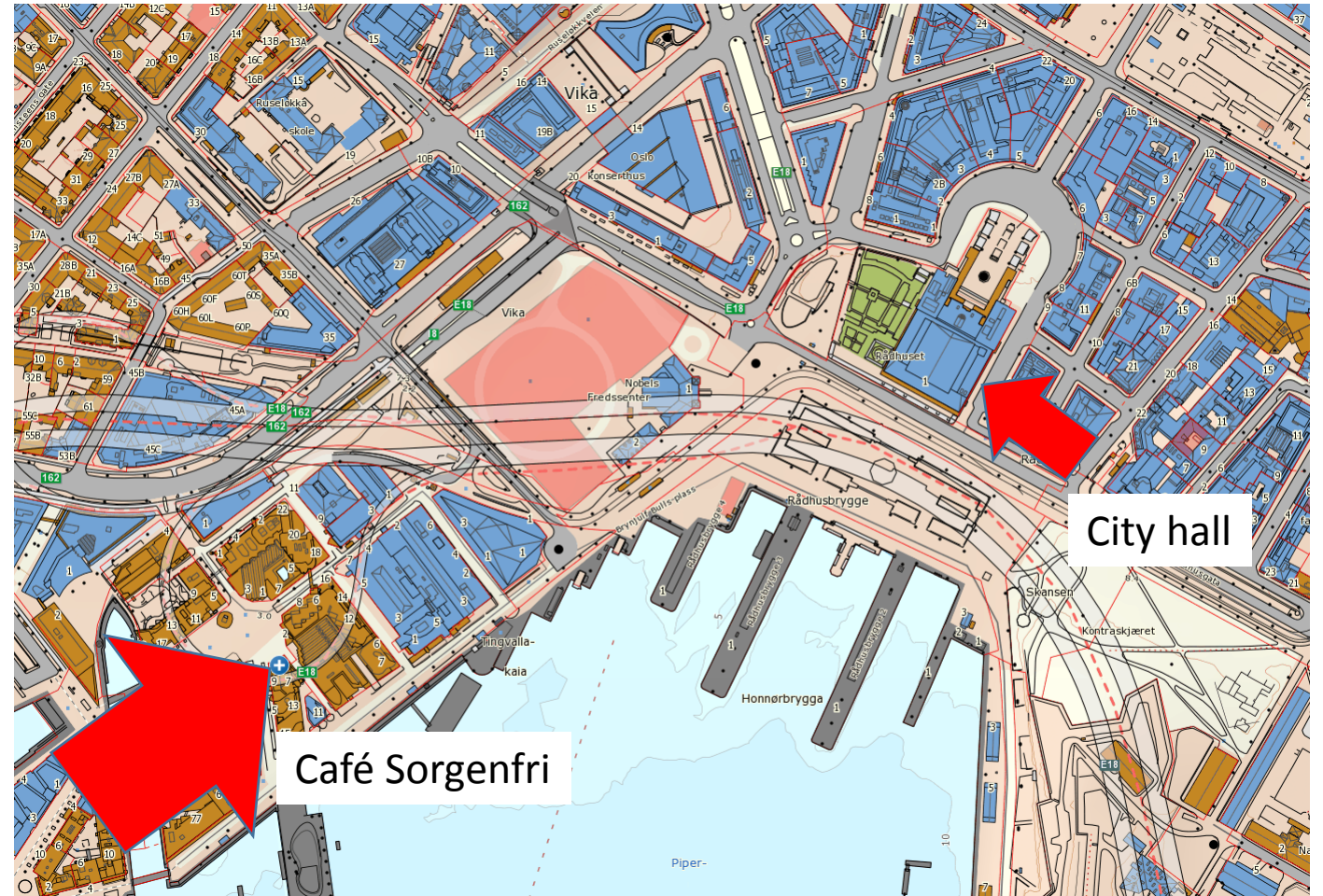


Café Sorgenfri



- Café Sorgenfri, **8 PM**
- Address: Bryggetorget 4 (Aker Brygge)
- 300 NOK – Cash

- Start up tomorrow: 8:45



Workshop Group picture

- At ground floor before leaving!

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Group 1: National Mapping Agencies

Group 2: Collaborative Ground Segment

Group 3: Toolboxes and training

Group 4: Users/End Users Requirements

Group 5: Research and new algorithms

Group 1: National Mapping Agencies (NMA)

- 1) What are the opportunities in the NMAs to develop visualisation tools of long S2 time series?
- 2) Are there authoritative national databases that can be created/updated with Sentinel images?
- 3) How to use Sentinel images in the update process of national databases when information given with Sentinel images is not consistent with database specifications? (identify where)
- 4) What are the current initiatives in your NMA?
- 5) What are the values of HR (<10m) satellite images for mapping agencies?
- 6) How can NMAs utilize Sentinel-2 data?
- 7) Do your NMA/country have restrictions regarding deliverance of Copernicus in-situ data (reference data (DEM Orthoimages etc))?

Group 2: Collaborative Ground Segment

- 1) How many in the group have established a National Ground Segment (NGS) for the Sentinels?
- 2) What are the main goals and requirements for this establishment? When do you think the NGS is functional?
- 3) Which role does it have? - a data center, mirror site, distribution node, support to science, analyses, etc.
- 4) How do you see EUs development of an Integrated Ground Segment? Do you see a role for your NGS?
- 5) Do you plan to use of a national DEM in your NGS? Other atmospheric correction than ESA provides?
- 6) How to collaborate between countries building the national CGS's?
- 7) How to deal with data products from different ColGSs? They can be based on different methods and input data.

Group 3: Toolboxes and training

- 1) Have you used the SNAP toolbox to process Sentinel data? If yes, what type of processing have you made? If no, why?
- 2) Do you have any comments on how the SNAP toolbox performs? E.g. ease of use, meets your expectations, provides the functionality you need, etc.
- 3) Do you use other tools to process Sentinel data (e.g. QGIS with Orfeo ToolBox (OTB), Python with osgeo, commercial tools)? Which and why?
- 4) Do you need training on specific tools to process Sentinel data? And to what level?

Group 4: Users/End Users Requirements

- 1) Have any of you used Sentinel-2 data? Have you checked the quality with other data?
- 2) What did you see as the biggest obstacle to use the Sentinel-2 data?
- 3) Do you plan to use Sentinel-1 and -2 in conjunction with each other?
- 4) Which application do you see have the highest potential?

Group 5: Research and new algorithms

- 1) What land cover temporal change can be observed with S2 time series (5 days / 10m / 13 channels)?
- 2) What automatic change detection methods can be used to identify these changes with S2 time series?
- 3) What are the new challenges and possibilities when long time series will be available?
- 4) For which applications is it necessary to investigate complementarity between S1/S2/S3 images? S2 and VHR images?
- 5) How do you see fusion strategy in each case (level, method)?
- 6) Do you know any examples of preliminary studies using complementarity between S1/S2/S3?