

## Annex

This Annex to the Understanding for the cooperation in the frame of the Sentinel Collaborative Ground Segment, signed between ESA and the Belgian State, Federal Office for Science Policy ("BELSPO"), acting in the capacity of Belgium's National Point of Contact (the NPC), on .....*26 September 2017*..... ("the Understanding"), describes the responsibilities and tasks of the NPC for the purpose of the implementation of the Sentinel Collaborative Ground Segment.

### Collaborative Archiving and Dissemination Centres (CAC), National Mirror Site

Activity	<p>The NPC or its Designated Entity intends to set up a National Mirror Site for hosting and onwards distribution of Sentinel 1, Sentinel 2 and Sentinel 3 family products, in order to ensure access and redistribution of the Sentinel family products for a limited period of time. The product coverage is intended to be as follows but can be subject to change:</p> <ul style="list-style-type: none"> <li>○ Sentinel 1 family products: Territory typically limited to Belgium</li> <li>○ Sentinel 2 family products: Territory typically limited to Belgium in the first instance, but to be expanded to cover Europe and Africa</li> <li>○ Sentinel 3 family products: Territory probably worldwide</li> </ul> <p>The NPC or its Designated Entity intends to setup a web site where a broad user community (not limited to scientific users) can have access to and download the Sentinel family products. The NPC or its Designated Entity will use all reasonable efforts to give the user community the opportunity to have a maximal uptake of such data.</p> <p>On top of dissemination of the original Sentinel data, the NPC or its Designated Entity is willing to generate and distribute a limited list of added value or derived products, tailored to the needs of the Belgian market.</p> <p>Further, the NPC or its Designated Entity intends to provide access to virtual machines where the Sentinel family products can be processed with the NPC or its Designated Entity processing cluster and the outcome thereof will be made available for the user requesting this.</p> <p>All functionalities and contents offered by the NPC or its Designated Entity will be provided on a reasonable-efforts basis</p>
ESA support	<p><b>a) Access to the Collaborative Hub</b></p> <p>ESA grants the NPC or its Designated Entity access to the Collaborative Hub (ColHub), a rolling archive, providing bulk dissemination capabilities for Sentinel data products. The ColHub will continuously store Sentinel data</p>

	<p>acquired during the last month(s) at the processing levels agreed as part of the Sentinel core data product list and the associated timeliness as defined in the CSC Operations Concept Document. It enables searching, browsing, previewing and downloading the Sentinel data. The time interval covered by the ColHub rolling archive will be scalable and include at least the last month of data.</p> <p>Access to the ColHub is allowed via a web authentication module. ESA will provide the NPC or its Designated Entity with a username and password to access the ColHub. This username and password may be used only by the NPC or its Designated Entity (including its representatives, employees and contractors involved in the initiative) for the purpose of the initiative and will not be shared with other natural or legal persons.</p> <p>The NPC or its Designated Entity will use the ColHub access only for the purpose of its activity in the initiative described above. Through registration at the ColHub, accessing and/or downloading available content, the NPC or its Designated Entity shall not misuse or interfere with the service of the ColHub. In particular, the NPC or its Designated Entity aims to build up an own mirror archive of Sentinel data and hence will not repeat the download of identical datasets from the ColHub, but will store downloaded Sentinel data for re-use and re-dissemination.</p> <p>All functionalities and contents offered by the ColHub are provided by ESA on a best efforts-basis, as set out in the Understanding and the “General Clauses and Conditions for the Sentinel Collaborative Ground Segment cooperation” appended to the Understanding (hereafter “General Clauses and Conditions”). The transmission of content from the ColHub may be interrupted or delayed by ESA in the event of technical constraints, such as the internet bandwidth. In such case, the download requested by the NPC or its Designated Entity will be enabled later, taking into account other users’ requests.</p> <p><b>b) Data transfer</b></p> <p>ESA will provide appropriate interfaces, to transfer Sentinel data to the NPC or its Designated Entity via internet.</p>
Time schedule	<p>The ColHub is operational with Sentinel data core products and ESA will support the connection to the NPC or its Designated Entity once the NPC or its Designated Entity is ready. Further data from Sentinel-5 Precursor will be included as soon as available in accordance with the related ESA data provision plans.</p> <p>It is envisaged that the Belgian National Mirror Site will start operations during 2017. Operations are planned to last for a duration of up to 5 years.</p>
Reporting	<p>In line with Section 5 of the Understanding, the NPC will keep ESA informed about the course and success of any Sentinel Collaborative Ground Segment initiative.</p>

	<p>The regular reports regarding the National Mirror Site shall have at least annual frequency, and shall as a minimum contain information regarding:</p> <ul style="list-style-type: none"> <li>• Sentinel data use and applications;</li> <li>• Onward-dissemination of Sentinel data, including user statistics of the national mirror site;</li> <li>• Any changes to the pre-agreed set up of activities that will have an impact on ESA's support to the national activities.</li> </ul> <p>More specifically, as concerns National Mirror Site usage statistics, the following minimum set of information shall be provided to ESA as part of the annual reports:</p> <p><b>User account statistics</b>, including:</p> <ul style="list-style-type: none"> <li>• Utilisation domain (i.e. research, commercial, education, other)</li> <li>• Usage field (i.e. atmosphere, emergency, marine, land, security, climate, other)</li> <li>• Country of the account user</li> </ul> <p>Note: the above fields should be requested as part of the user account registration</p> <p><b>Data dissemination statistics</b>, including:</p> <ul style="list-style-type: none"> <li>• Data delivered per user account</li> <li>• Data volume per user account</li> <li>• Statistics on the core product delivered</li> </ul>
Sentinel data governance	Sentinel data made available via the ColHub is governed by the provisions of Section 6 of the Understanding.