User-friendliness of GEO/EO clouds from a legal perspective

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Paradigm shift towards cloud-based online platforms

- Paradigm shift in the EO community towards digital online business.

- Scalable cloud-based online platforms offer
  - Data as a Service (DaaS),
  - Infrastructure as a Service (IaaS),
  - Software as a Service (SaaS) or
  - Platform as a Service (PaaS)

- Cloud based online platforms allow the scientific communities, EO value-adding companies, service providers and other users
  - to search, analyse and process significantly higher volumes of data,
  - to reduce costs of production and service delivery, and
  - to reach their customers in more effective ways.

- According to the 2019 Copernicus Market Report,
  - “cloud platform holders, providing storage and easy access as well as cloud processing power and tools for basic image processing, are expected to play a major role in the EO data market in the coming decade”.

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EO Platforms are bridging the gap from data generation to exploitation

→ Under the traditional set-up mission ground segments make data available for download at the data generation layer, the users discovers and downloads the data on their own infrastructures.

→ Over the past years, numerous EO platforms have been launched in Europe, in order to close the gap between the data generation layer and the exploitation layer.
Recent, but certainly still not complete overview on the European platform landscape

Source: Presentation by Gunter Landgraf, ESA ESRIN, Data Applications Division, at 5th DCB Meeting on 5 Nov 2020
In October 2020, EARSC launched a survey to first identify the user’s experience on exploitation platforms’ current use, barriers and expectations.

User friendliness was identified as one of the top-priorities.

Such user-friendliness may also concern accessing and understanding legal requirements for platform use.
Legal Issues associated to GEO/EO clouds

→ The more comprehensive GEO/EO clouds are, the more legal issues come into play and the more information has to be provided to users.

→ As with any services which are officered online though websites,
  → privacy policies, including cooky policies, as well as general website terms and conditions come into play.

→ As for any data access and use,
  → data licenses are relevant.

→ Concerning the use of processing tools,
  → such use required appropriate licensing agreements.

→ User data as well as data generated in the cloud
  → may raise privacy concerns, as well as concerns in relation to ownership.

→ Offering cloud services
  → is subject to highly complex cloud service conditions and may raises concerns on security.
Transparency and user friendliness are key to promote cloud uptake

→ Several surveys revealed that a lack of transparency and user friendliness on legal requirements hinders the uptake of EO cloud platforms.

→ The issue is not that much about legal implications of using EO cloud platform.

→ The issue is rather about understanding legal implications associated to the use of EO cloud platforms.

→ Broad usage rights for user data are one, among several examples, on uncertainties regarding the terms under which EO cloud platforms are used.

  → Cloud service terms regularly grant the service provider the right to use any user content for the purpose of providing or improving its services.

  → Such broad usage rights raise concerns on losing control over the uses of data.

→ In order to ensure the uptake of EO cloud platforms, users need to be aware of the legal implications.

→ Legal implications shall be made available in a clear and predictable manner.