EGI-ACE LOGO

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**Pre-commercial / Service Level Agreement**

between

EOSC DIH Partners and DigiFarm

| **Pilot** | CropCloud |
| --- | --- |
| **Service Provider(s)** | DigiFarm AS |
| **First day of service delivery** | 01.11.21 |
| **Last day of service delivery** | 01.11.22 |
| **Status** | Final |
| **Agreement finalization date** | 11.01.21 |
| **Agreement link** |  |

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# ARTICLE 1: Involved Parties

This agreement is made for supporting pre-commercial services and outlines the services and service levels to be provided

BETWEEN:

For the requesting party, collectively referred to as the “Pilot” are represented by the following organisations:

(A) Pilot DigiFarm, whose registered office is at Holsetgata 22, 2317 Hamar, Norway with registration number 924 778 105 (“DigiFarm”), hereby represented by Nils Helset and

Forming the Digital Innovation Hub Representatives and hereinafter collectively referred to as the “Partners” are represented by the following organisations:

(B) **EGI Foundation**, whose registered office is at Science Park 140 1098XG , Amsterdam (“**EGI**”), hereby represented by Sy Holsigner, Strategy and Innovation Team Lead and EOSC DIH coordinator.

Each to be referred to individually as a ‘Party’ and together as the ‘Parties’

Representatives and contact information are defined in ARTICLE 7.

**Brief Description of Pilot**

Brief introduction to the company and pilot: DigiFarm is a Norwegian based ag-tech startup established in 2019. DigiFarm’s core vision is to detect the world’s most accurate field boundaries and seeded acres to power precision agriculture. Leveraging the latest advancements in Artificial Intelligence technology. This is achieved through developing deep neural network models for automatically detecting field boundaries through super-resolving Sentinel-2 satellite imagery to 1 meter resolution. DigiFarm has successfully validated the model on 15+ million hectares of fields achieving detection accuracies of above 96%, 12-15% higher than existing boundary data (Cadastral, LPIS in EU and CLUs in US).

The pilot will include: developing and model training deep neural network model for detection of entire-country sized regions including: Germany, Austria, Belgium and the United Kingdom. DigiFarm will leverage the multi-temporal composite from deeply resolving Sentinel-2 at 1 m resolution as the basis, which will require some further modifications to the processing pipeline and model training, due to significant variability in agricultural practices, topography, crops, shapes/sizes and forms of fields from Norway to the intended pilot markets. We intend to achieve an average accuracy of IoU (Intersection over Union) of 0.96 or above.

# ARTICLE 2: Scope

This Agreement aims to set up the formal commitment of the Pilot’s engagement in the EOSC Digital Innovation Hub and managed by the EOSC DIH Partners and to regulate the applicable terms and conditions.

# ARTICLE 3: Entry into Force and Termination

This Agreement shall enter into force from the date that the last Party signs it and it will bind the Parties until 31st December 2022. If any Party wishes to extend the duration after the Agreement termination date, an extension will be negotiated between all Parties and agreed.

The EOSC DIH partners retain the right to introduce changes in the Service, in which case the Pilot Members retain the right of terminating the Agreement.

The Agreement can be terminated at any time upon agreement of the parties. Amendments, comments and suggestions must be addressed to EOSC DIH and the Parties according to ARTICLE 7.

Any future collaboration will have to be agreed in a separate Agreement.

# ARTICLE 4: Activities and Commitment

The specific activities to be carried out in the framework of the agreement and that all Parties commit to taking part in to be duly communicated by the Partners in due course.

1. **Activity 1:** Provision of the infrastructure provided (GPUs and computing framework).
2. **Activity 2:** Testing and usage of the infrastructure provided (GPUs and computing framework) for model training; developing and model training deep neural network model for detection of entire-country sized regions including: Germany, Austria, Belgium and the United Kingdom.
3. **Activity 3:** Dissemination of the output and results of project activities.

Any service development support provided through this agreement requires acknowledgement to any publication of the services i.e. This work is/was co-funded by the EOSC Future project under the European Union Horizon Programme call INFRAEOSC-03-2020 - Project ID 101017536.

# ARTICLE 5: Services

## 5.1 Service Descriptions

The Services that are offered by the EOSC DIH within this agreement comprise:

* Computing Infrastructure

Payment mode:

* Sponsored - Model where the Pilot uses services that are funded, or co-funded by the European Commission or government grants.

## 5.2 Technical Service Specifications

| **i.e. Compute (full table to be replaced depending on technical service)** | |
| --- | --- |
| Type: | 4 x NVIDIA A100 |
| Number of CPU cores: | 32 |
| Total amount of Memory (GB): | 256G |
| Local disk (GB): | 1.5T |
| Public IP addresses: |  |
| Duration: | 1 year |

Optimal:

* Type/model of GPU: A100
* Number of GPU 4-5 (higher the better ofc)
* Number of CPU cores: 32
* Total amount of Memory: 256G
* Local disk: Number of gpu \* 1.5T

Minimal:

* Type/model of GPU: V100
* Number of GPU: 5-6
* Number of CPU cores: 32
* Total memory: 256G
* Local disk: Number of gpu \* 1T
* Duration: Max 4 months at 100%

The Services are supported by additional services:

* Accounting
* Monitoring
* Helpdesk

## 5.3 Hours and Exceptions

The Services operate during the following hours: twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days a year.

The following exceptions apply:

* Planned maintenance windows or service interruptions (“scheduled downtimes”) will be notified via email in a timely manner i.e. 24 hours before the start of the outage.
* Downtime periods exceeding 24 hours need justification.

## 

## 5.4 Support

Support is provided via <https://ggus.eu/> and is available between:

* Monday to Friday.
* From 9:00 to 17:00 in the time zone of the relevant Resource Centres.

Service times always apply with the exception of public holidays in the country of the supporting Resource Centres [Italy].

## 5.5 Incident Handling

Incidents will be handled according to the Quality of Support level that is estimated according to the impact of the outage or service quality degradation.

| **Incident priority** | **Response time** |
| --- | --- |
| Less urgent | 5 working days |
| Urgent | 5 working days |
| Very Urgent | 1 working day |
| Top Priority | 1 working day |

So the incidents, based on their priority will be responded to with the following response times:

| **Incident priority[[1]](#footnote-0)** | **Response time** | **Comment** |
| --- | --- | --- |
| Less urgent | 5 working days | wishes and enhancements that are "nice to have" |
| Urgent | 5 working days | service degraded; work-around available |
| Very Urgent | 1 working day | service degraded; no work-around available |
| Top Priority | 1 working day | service interrupted; needs to be addressed as soon as possible |

**Table 1. Response times to incidents according to the incident priority of “Medium” services**

## 5.6 Service Requests

In addition to resolving incidents, standard service requests will be fulfilled through the defined support channels in the same way as incidents. Service requests are classified as “Less urgent”.

## 5.7 Service Level Targets

**Monthly Availability**

* Defined as the ability of a service to fulfil its intended function at a specific time or over a calendar month.
* Minimum (as an average percentage per month):
  + Service [name]: 95%

# ARTICLE 6: Limitations, Constraints and Force Majeure

The Services provisioning is subject to the following limitations and constraints.

* Support is provided in English.
* Availability calculations are based on the Service Monitoring operational results.
* Failures in VO monitoring are not considered as SLA violations.
* Downtimes needed to ensure the security of the Service issues are not considered Agreement violations.
* Force Majeure. A party shall not be liable for any failure or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond its reasonable control. This means any situation or event that:
  + Prevents either party from fulfilling their obligations under this Pre-Commercial Agreement,
  + Was unforeseeable, exceptional situation and beyond the parties’ control,
  + Was not due to error or negligence on their part, and
  + Proves to be inevitable in spite of exercising all due diligence.
  + The following cannot be invoked as force majeure:
    - Any default of a service, defect in equipment or material or delays in making them available, unless they stem directly from a relevant case of Force Majeure,
    - Labour disputes or strikes, or
    - Financial difficulties.
  + Any situation constituting Force Majeure must be formally notified to the other Party without delay, stating, the nature, likely duration and foreseeable effects.
  + The Parties must immediately take all the necessary steps to limit any damage due to Force Majeure and the Party prevented by Force Majeure from fulfilling its obligations under this Pre-Commercial Agreement cannot be considered in breach of them.

# 

# ARTICLE 7: Communication, Reporting and Escalation

## 7.1 General Communication and Contacts

The following contacts will be generally used for communications related to the service in the scope of this Agreement.

| **Pilot contact(s)** | Nils Helset nils@digifarm.io Co-founder & CEO of DigiFarm |
| --- | --- |
| **Pilot technical contact(s)** | Konstantin Varik konstantin@digifarm.io Co-founder & CTO of DigiFarm |
| **EOSC DIH contact(s)** | Sy Holsinger, [sy.holsinger@egi.eu](mailto:sy.holsinger@egi.eu)  Elisa Cauhé, elisa.cauhe@egi.eu |
| **EOSC DIH technical contact(s)** | Marcin Plociennik, marcinp@[man.poznan.pl](http://man.poznan.pl/) |
| **Service Support contact** | EGI-ACE: [https://ggus.eu](https://ggus.eu/) |

## 7.2 Reporting

As part of the fulfilment of this Agreement and provisioning of the service, the following reports will be provided:

| **Report title** | **Contents** | **Frequency** | **Produced by** | **Delivery** |
| --- | --- | --- | --- | --- |
| Results Publication | The document provides a final summary of key activities and results achieved. | Pilot end or at least an annual basis - TBD | Pilot | Published online |

All reports shall follow predefined templates

## 7.3 Violations

All Parties commit to communicating any violation or anticipated violation. The following rules are agreed for communication in the event of violation:

* In case of violations of the Services targets for three consecutive months, EOSC DIH partners will provide justifications to the Pilot members
* The Pilot members will notify the EOSC DIH partners in case of suspected violation. The case will be analysed to identify the cause and verify the violation.

## 7.4 Escalation and Complaints

For escalation and complaints (A pilot member complaint is an expression of dissatisfaction with an EOSC DIH service or support, either orally or in writing), the EOSC DIH contact point shall be used and vice versa.

# ARTICLE 8: Information Security, Data Protection and Confidentiality

The following rules for regarding information security, data protection and confidentiality related to the agreement apply.

* Assertion of absolute security in IT systems is impossible. The service provider is making every effort to maximise security level of users’ data and minimise possible harm in the event of an incident.
* The Service Provider will define and abide by an information security and data protection policy related to the service being provided.
* The parties of the Agreement will meet all requirements of any relevant policy or procedure of the Parties and will comply with the applicable national legislations.
* The terms of this Agreement and all communications, whether written or verbal, between the Parties are confidential and none of the Parties shall (and shall ensure that its officials, employees and contractors shall not) either during or after the period of this Agreement, disclose the same or any of the others’ commercial or technical activities or policies to any third party, except so far as is necessary for the execution of its obligations hereunder or as required by law or any competent court.

# ARTICLE 9: Miscellaneous

This shall not constitute or imply any partnership, joint venture, agency, fiduciary relationship or other relationship between the Parties other than the commitment defined through this Agreement.

This Agreement is personal to the Parties and none of the Parties shall assign or otherwise transfer any right or obligation hereunder without the prior written consent of the other.

# Signatures

IN WITNESS WHEREOF, the Parties have caused their duly authorised representatives to sign this Agreement, in the English language.

The following agree to the terms and conditions of this Agreement:

 

TBD  
EOSC DIH

[Partner Authorized Name]  
[Role]

 

 

TBD  
DigiFarm

Nils Helset  
Co-founder & CEO

 

# 

# Annex

1. <https://wiki.egi.eu/wiki/FAQ_GGUS-Ticket-Priority>

   [↑](#footnote-ref-0)