Mastering EOSC Helpdesk: Training for providers and support teams
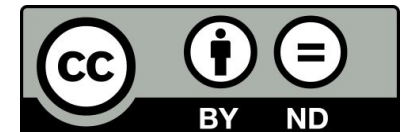
Pavel Weber (KIT)
Joshua Ocansey, CESSDA
Pedro Principe, OpenAIRE
08.03.2023
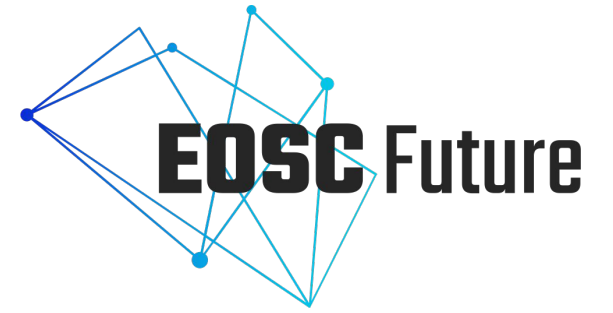
Agenda

- **Help Desk in Modern Federated IT-Infrastructure**

- **Main Capabilities and Workflows of the EOSC Helpdesk**

  - ○ **Practical session**

- **Q&A**

- **Integration with Help Desk for Providers**

- **Example of Integration and First Experiences**

- **Q&A and Open Discussion**

Help Desk in modern federated IT-Infrastructure

What is a Help Desk and What It is for?

A **Help Desk** is a software tool or team of agents that provides support for the customers and users of the organization in resolution of their problems, technical incidents or questions related to the products and services of the organization.

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What is a Help Desk and What It is for?

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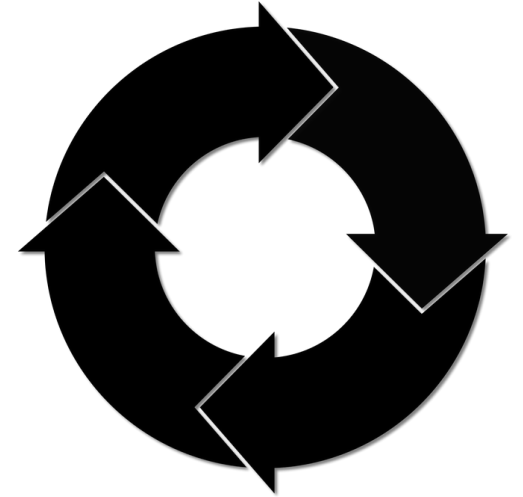

A **Service Desk** is a one-stop shop between customers and service organization with broad range of support functions, typically tightly integrated with IT services and business processes of the organization.

What is a Help Desk and What It is for?

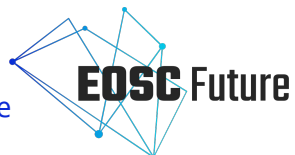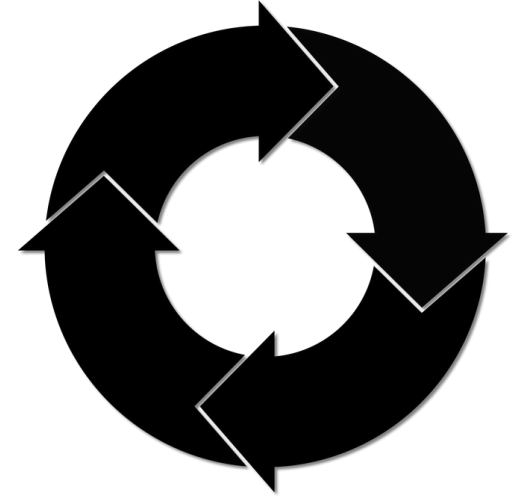**Behind each service there is a Process…**

What is a Help Desk and What It is for?

Behind each service there is a Process…

> **Process :**
>
> **Set of activities that bring about a specific objective or set of results from a set of defined inputs**

ITEMO

FitSM | Standards for lightweight IT service management

What is a Help Desk and What It is for?

Behind each service there is a Process…

Process

Objectives
Policies
Procedures

Inputs
Outputs
Activities

Roles

Process :

Set of activities that bring about a specific objective or set of results from a set of defined inputs

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What is a Help Desk and What It is for?

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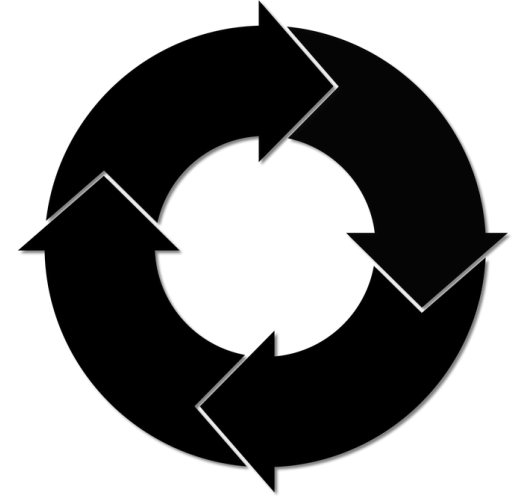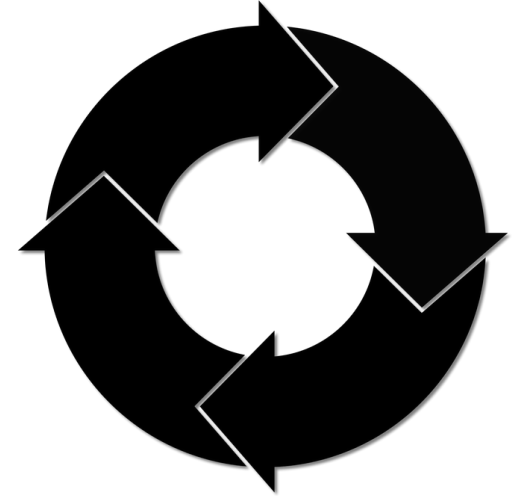Procedures

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ITEMO FitSM Standards for lightweight IT service management

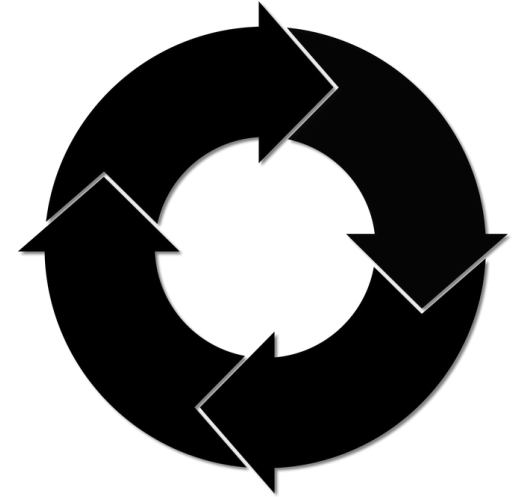**Incident & Service Request Management**

What is a Help Desk and What It is for?

Behind each service there is a Process...

> **Incident & Service Request Management**

Objective:

To restore normal / agreed service operation within the agreed time after the occurrence of an incident, and to respond to user service requests.

Incident & Service Request Management

A few more definitions…

Incident:

Unplanned disruption of operation in a service or degradation of service quality (versus the expected or agreed level of operation according to service level agreements).

Incident & Service Request Management

A few more definitions…

Incident:

Unplanned disruption of operation in a service or degradation of service quality (versus the expected or agreed level of operation according to service level agreements).

Service request:

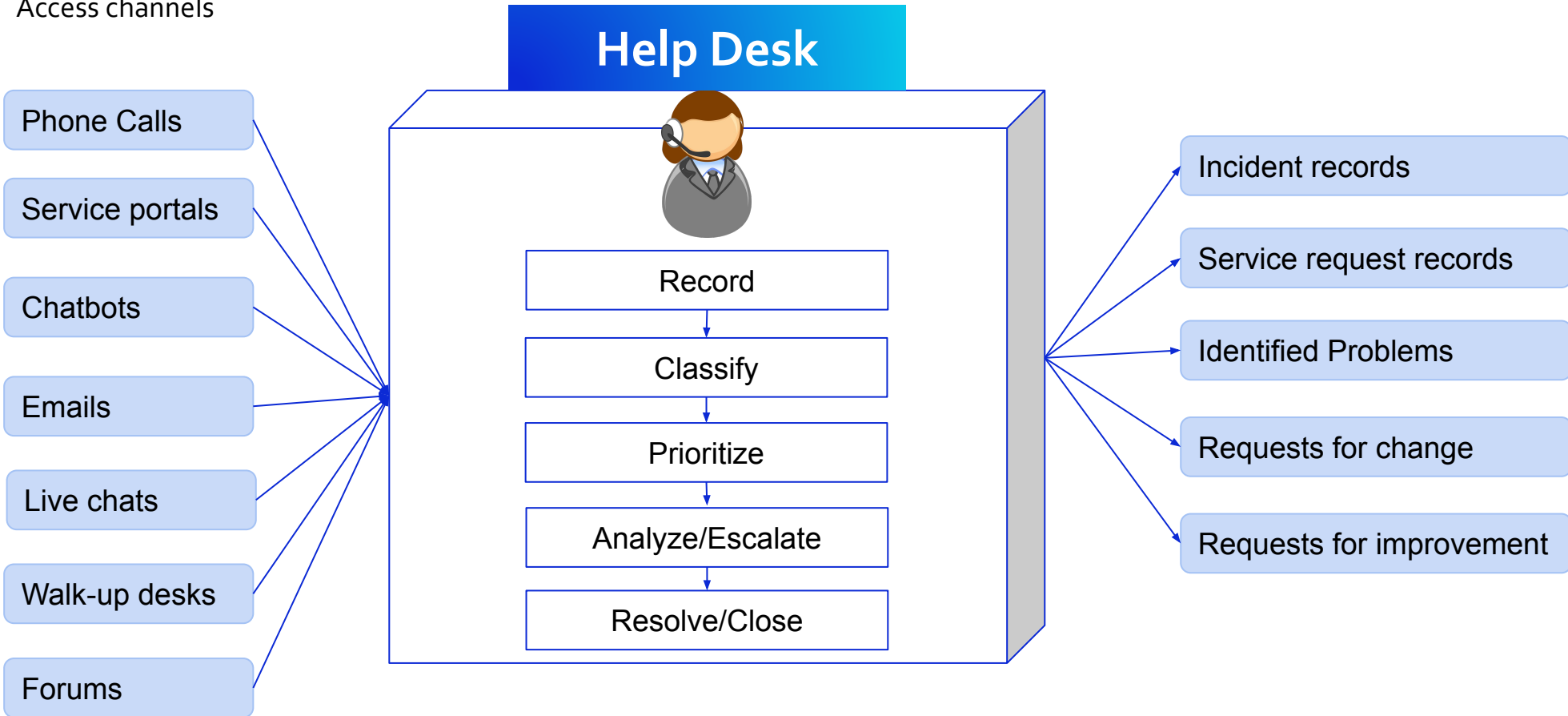**Request for information, advice, access to a service or a pre-approved change.**

Help Desk activities

Access channels

Help Desk

Phone Calls

Service portals

Chatbots

Emails

Live chats

Walk-up desks

Forums

Record

Classify

Prioritize

Analyze/Escalate

Resolve/Close

Incident records

Service request records

Identified Problems

Requests for change

Requests for improvement

Help Desk Benefits

Process-driven help and support for users and customers

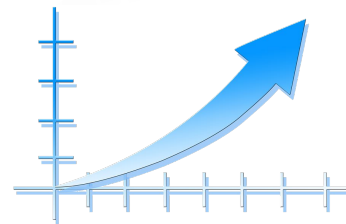Customer satisfaction and increased productivity

Better Collaboration and Communication within organization

Improved service delivery and operations

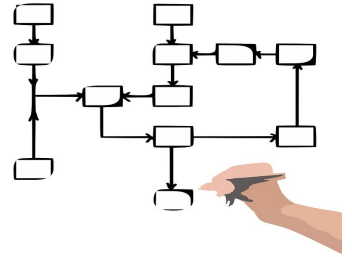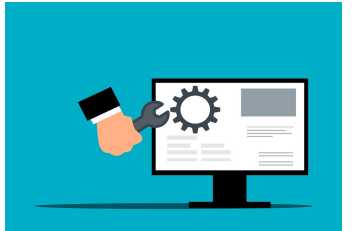Scale up organization: optimize and automate operations
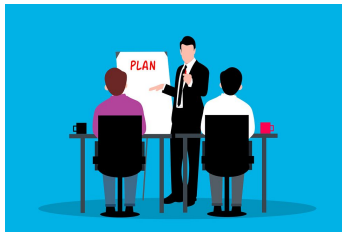
Major Challenges: in any Organization

Define Process: policies, procedures, workflows

Choose appropriate software/technology

Train your support team

Get the customer tickets answered/resolved in agreed time

Major Challenges: in EOSC

Distributed EOSC Environment

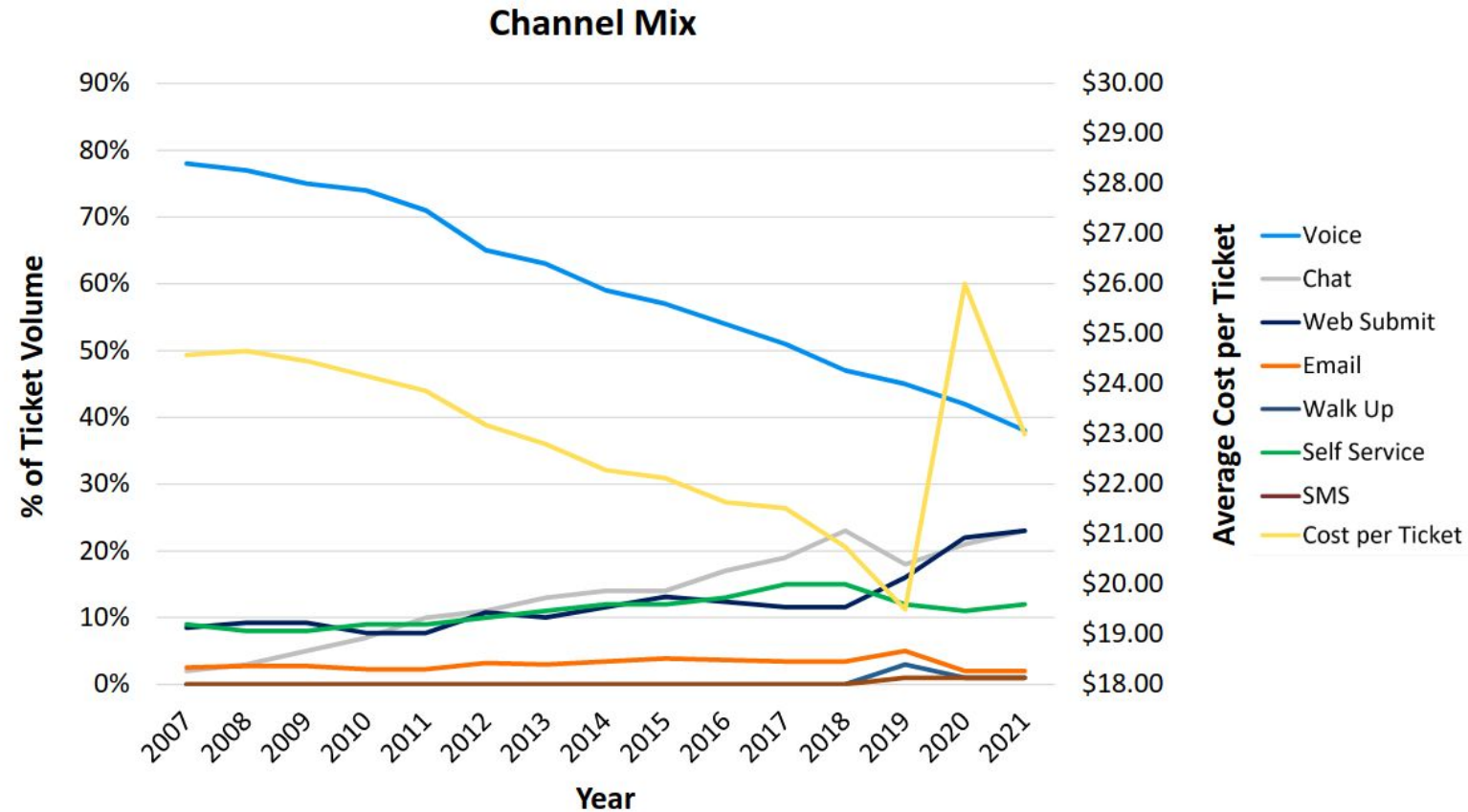Multiple organizations, communities, service providers

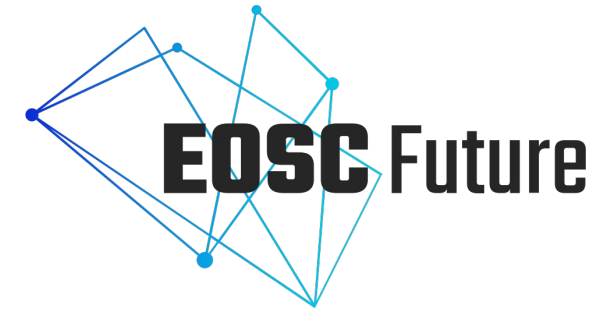**Alignment of processes and procedures**

Different definitions of ISRM process, interoperability issues, organizational changes, support groups

Integration with multiple EOSC Services

Different mapping schemes, user journeys, integration scenarios

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Major Challenges: Dream of Self Service

Channel Mix

Legend: Voice, Chat, Web Submit, Email, Walk Up, Self Service, SMS, Cost per Ticket

MetricNet — Performance Benchmarking

© 2023 MetricNet, LLC, www.metricnet.com

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Main Capabilities and Workflows of the EOSC Helpdesk

EOSC Helpdesk Reference Card

Reference card

Helpdesk URL	https://eosc-helpdesk.eosc-portal.eu
Helpdesk Email	help@eosc-future.eu
Helpdesk page in EOSC Portal	https://eosc-portal.eu/contact-us
Helpdesk Knowledge Base	https://eosc-helpdesk.eosc-portal.eu/help
Interoperability guidelines	https://zenodo.org/record/7308617#.Y24fR37MKEJ
Access policies	Wide-access for all EOSC Users Policy-based for agents with support roles depending on the support group, community.

Access Channels

1 Step

- Knowledge Base
- Service Documentation

2 Step

Email

Helpdesk Dashboard

Multiple Feedback Forms

Telegram Bot: @EOSC Helpdesk

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Key Functions and Workflows of the EOSC Helpdesk Technology

Open-source rapidly developed technology Zammad

Key Functions and Workflows of the EOSC Helpdesk Technology

Open-source rapidly developed technology Zammad

Custom workflows (filters, automatic ticket assignment automatic escalation procedure, notifications)
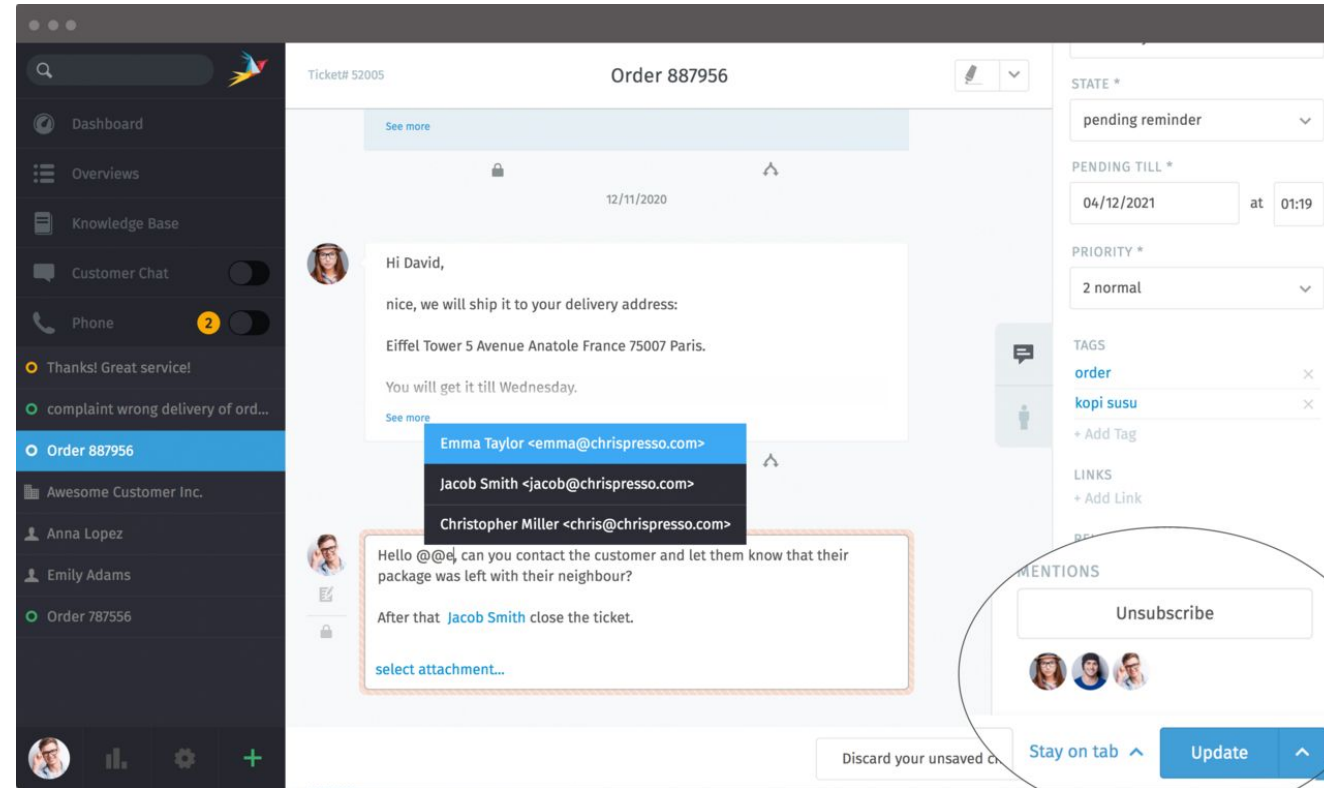
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Key Functions and Workflows of the EOSC Helpdesk Technology

Detailed build-in statistics and reporting
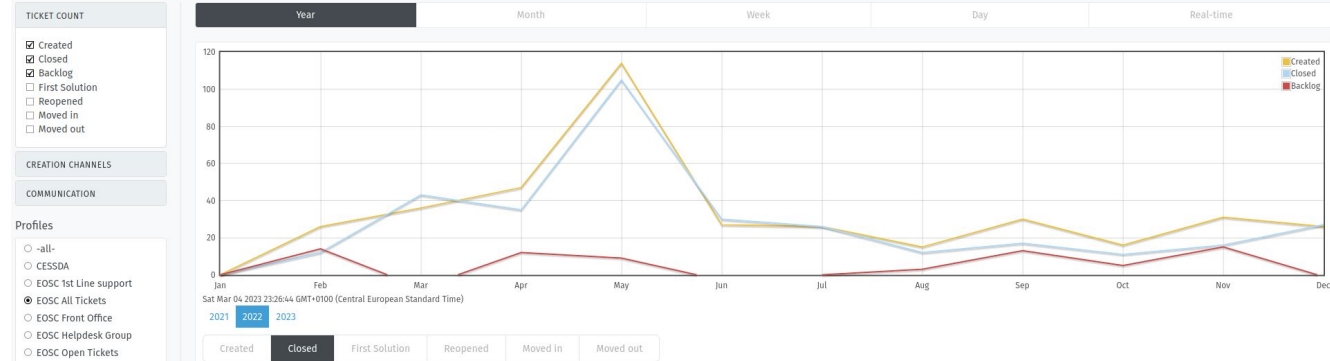
Key Functions and Workflows of the EOSC Helpdesk Technology

Detailed build-in statistics and reporting
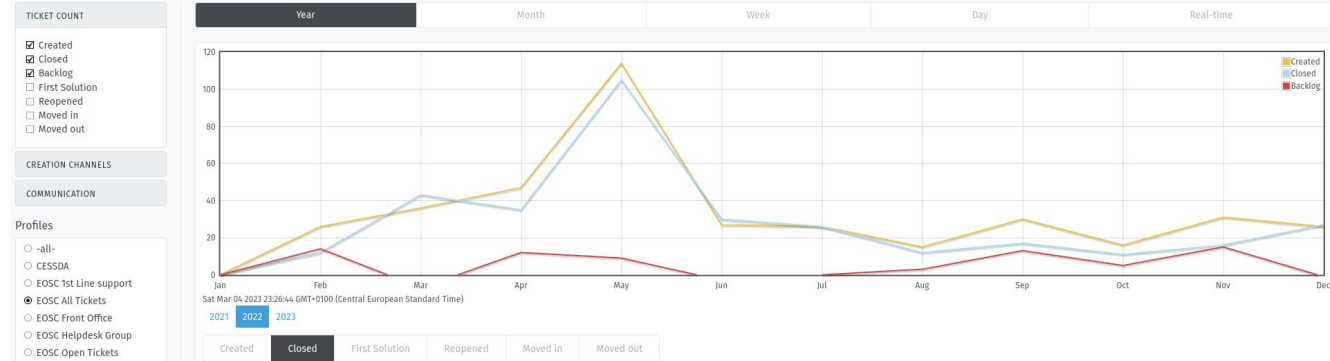
Easy integration with Grafana

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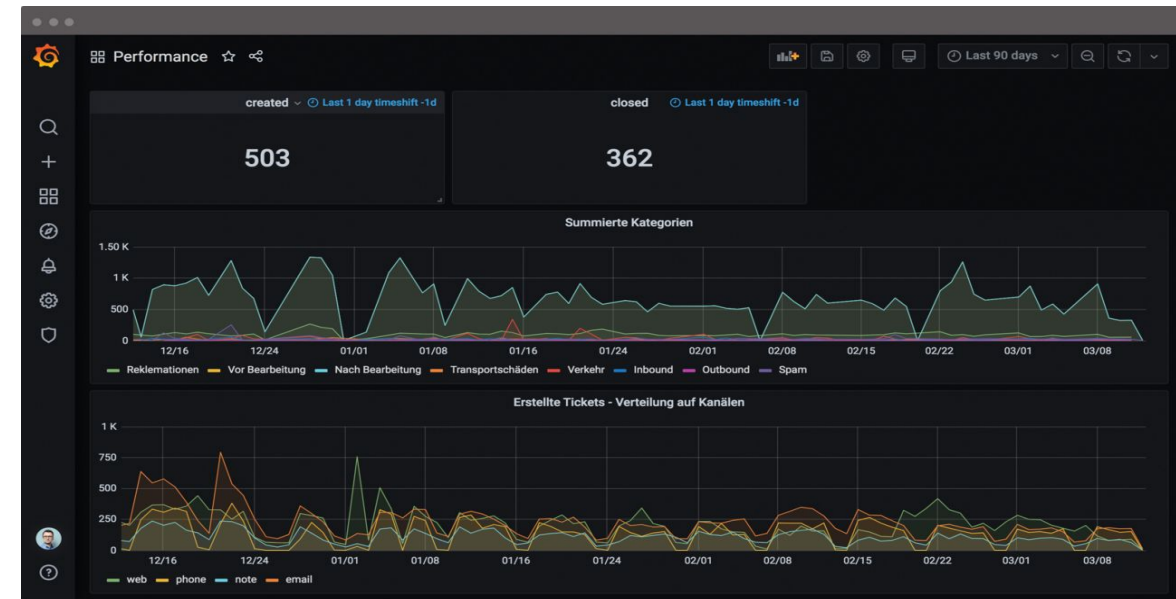
Key Functions and Workflows of the EOSC Helpdesk Technology

Integration with GitLab/GitHub
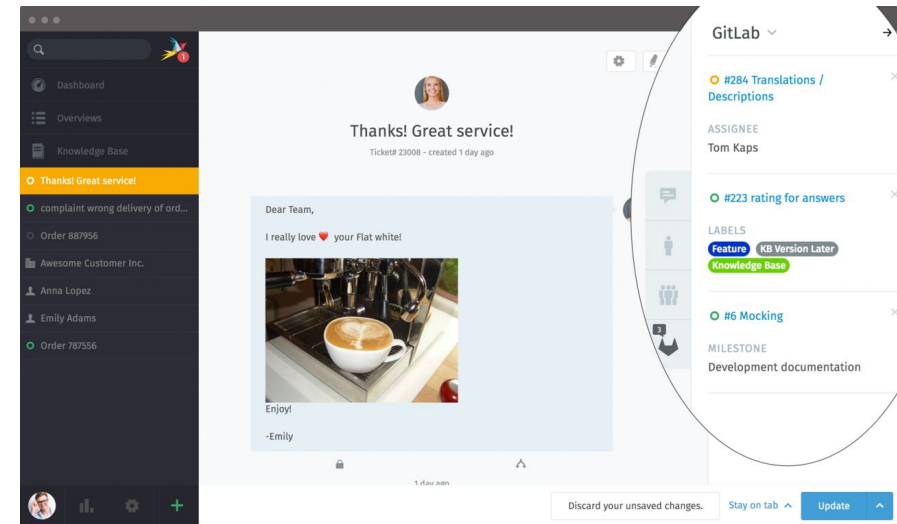
Helpdesk Security

S/MIME Support

Access history

Connected Devises

EOSC Future
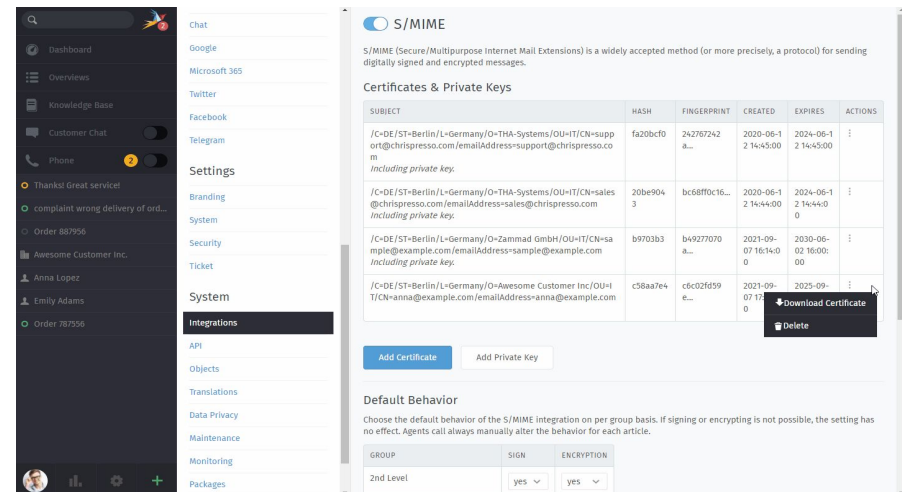
Key Functions and Workflows of the EOSC Helpdesk Technology

**Knowledge Base
integrated with Helpdesk**

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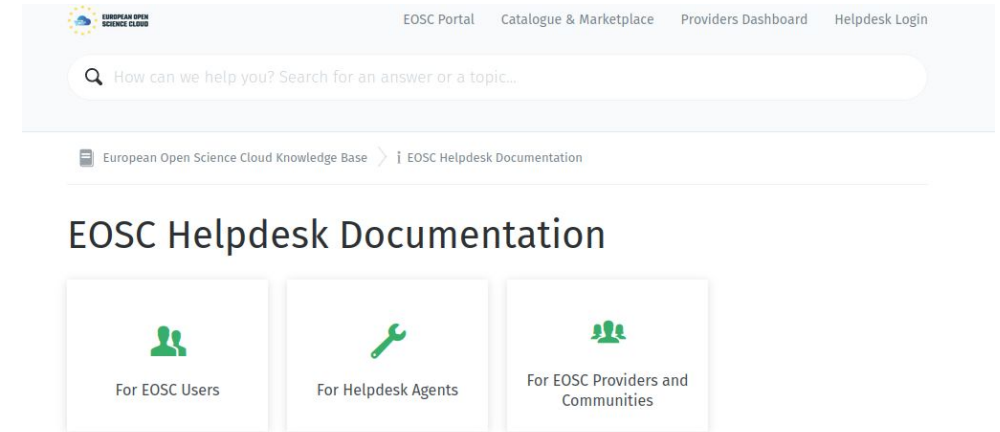
EOSC Helpdesk Status:

- Hosted on-premise at KIT (Karlsruhe Institute of Technology, Germany)
- Number of registered users: >500
- Number of agents 70
- 60 Support Groups in Total
- EOSC Ticket rate ~30 Tickets/M, Total ticket rate 150 Tickets/M
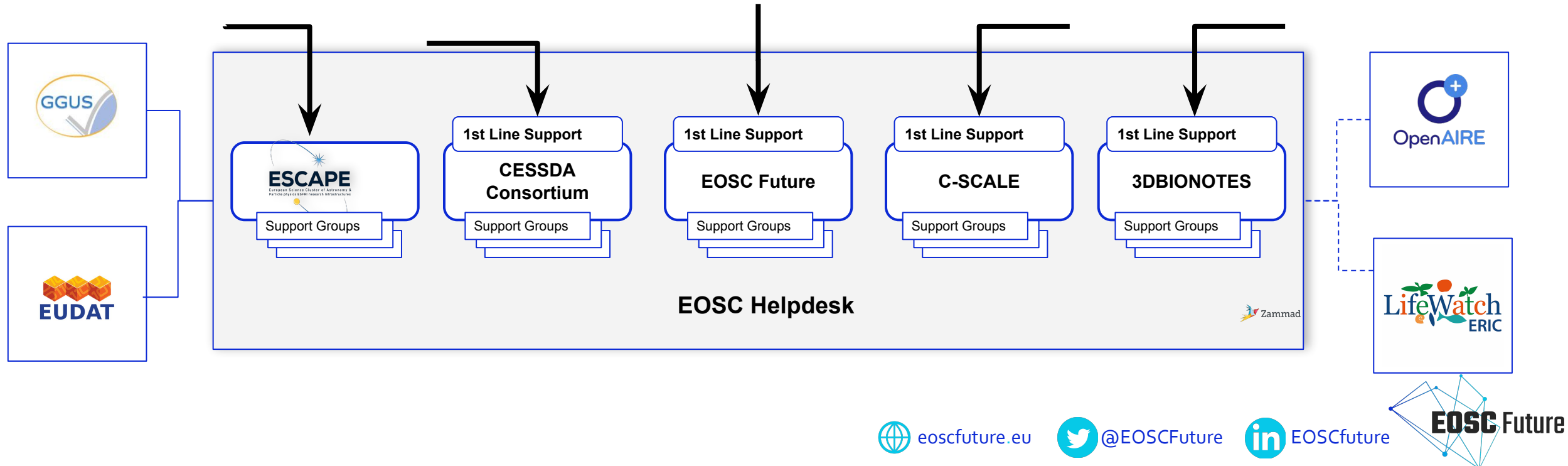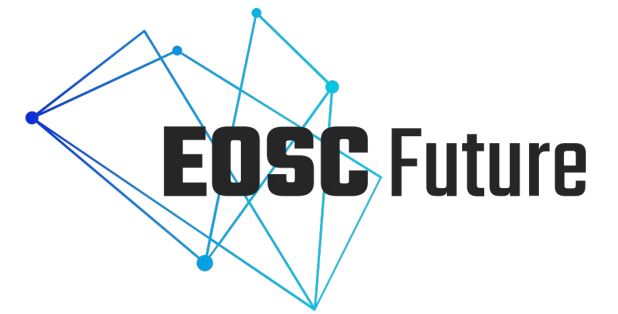
Practical Session

Typical Custom Workflow for Resolving a Request

User needs to submit a request

Ticket is registered

User is notified about resolution

Ticket submission

Ticket registration

Ticket management

Notification of resolution

Ticket is closed

Ticket is submitted

Ticket is resolved

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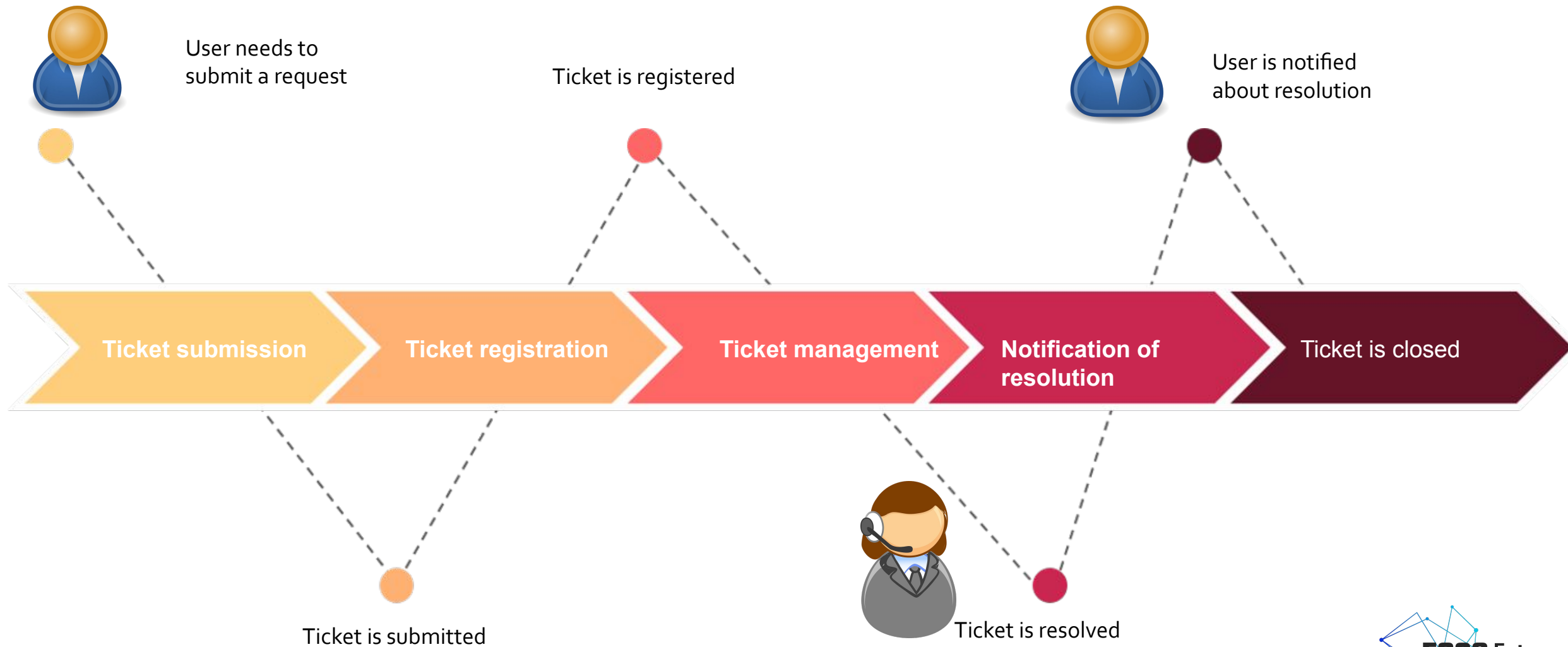
Practical exercise (optional)

- Login to the Helpdesk
- Change to dark mode :)
- Find the customer ticket
- Include article from Knowledge Base in the answer
- Submit answer to customer

Practical exercise (hints)

- Go to the Helpdesk https://eosc-training.zammad.com
  - Register as a **new customer** https://eosc-training.zammad.com/#signup
  - Confirm your mail
    - No worries to provide real mail (the instance will be deleted a few days after)
  - Get **Agent Role**
- Change to dark mode :): Your profile → Mode
- Find the customer ticket
- Include article "Ticket Management" from Knowledge Base in the answer using search by typing "??"
- Submit answer to customer

Q&A
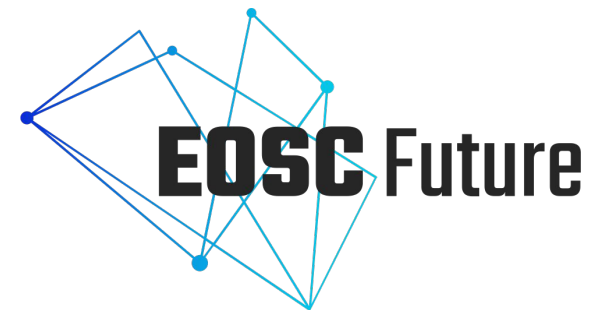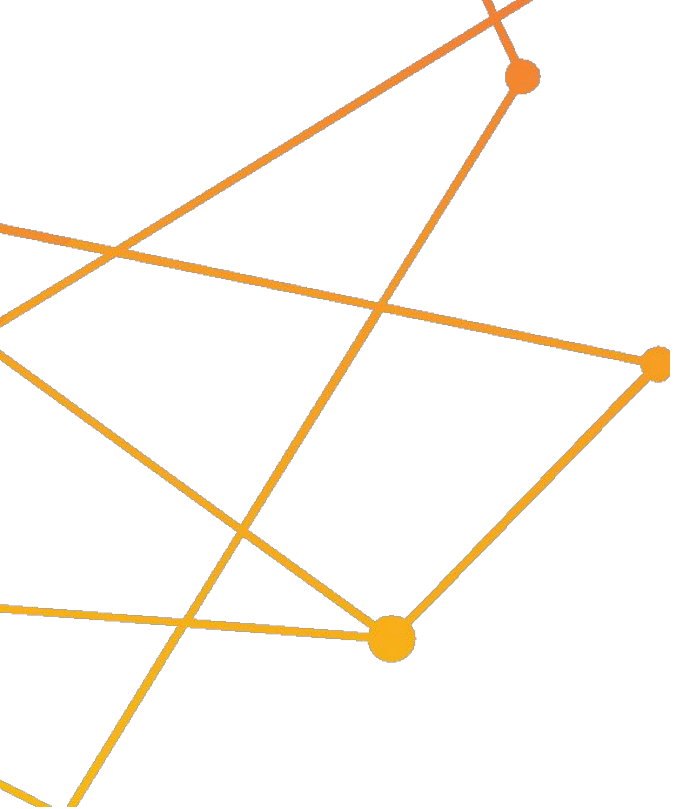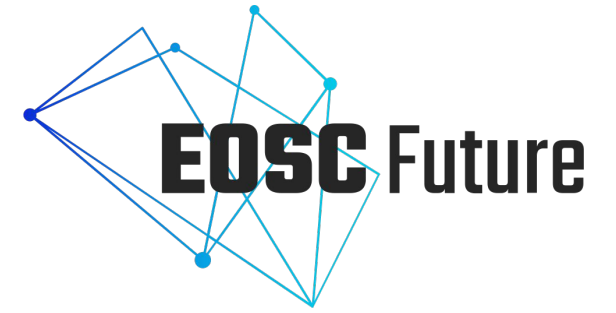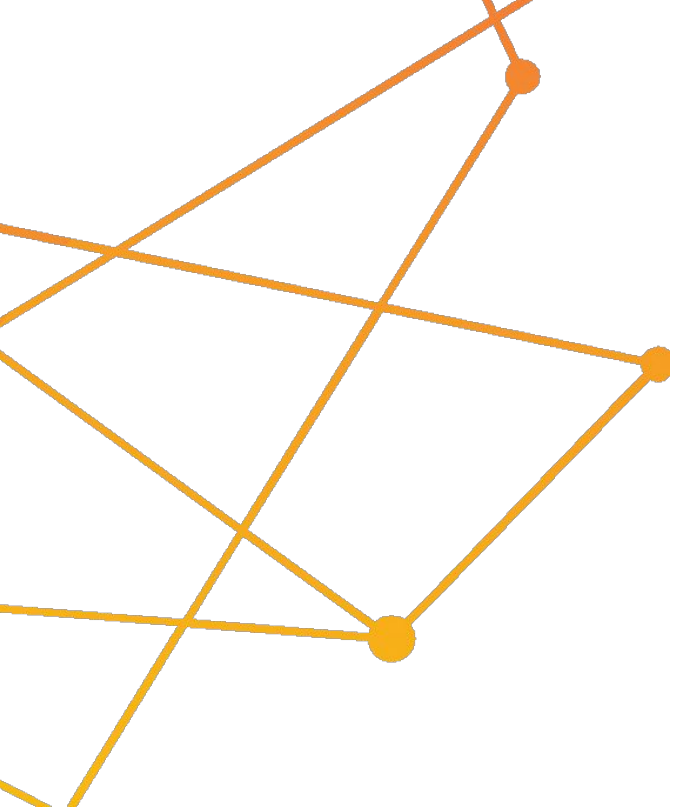
Integration with Helpdesk for Providers

Why to integrate

Typical initial situation:

- **Small provider/organization**
  - Small group
  - 1 service
  - 1 mailing list
  - Resources are limited

- **Big organization**
  - Multiple groups and divisions
  - Multiple services or infrastructures
  - Helpdesk system in place
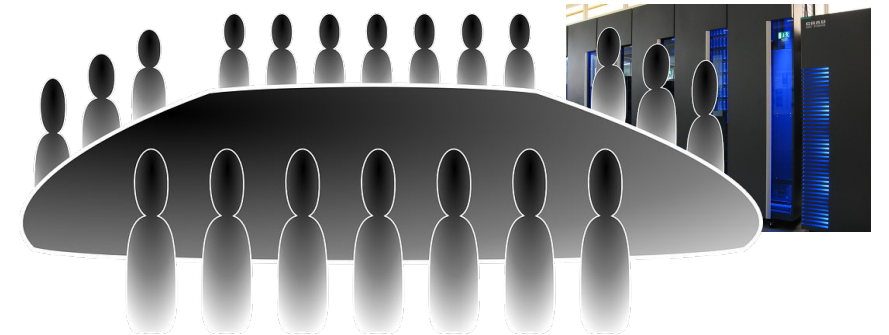
Why to integrate

Benefits of the helpdesk integration/adaptation with EOSC

- **Small provider/organization benefits:**
  - Consistent helpdesk experience for users
  - More professional delivery of the service and scale up
  - No need to run own helpdesk

- **Big organization benefits:**
  - Instant interaction with other EOSC players
  - Wider audience, more users
  - Avoid working in silo
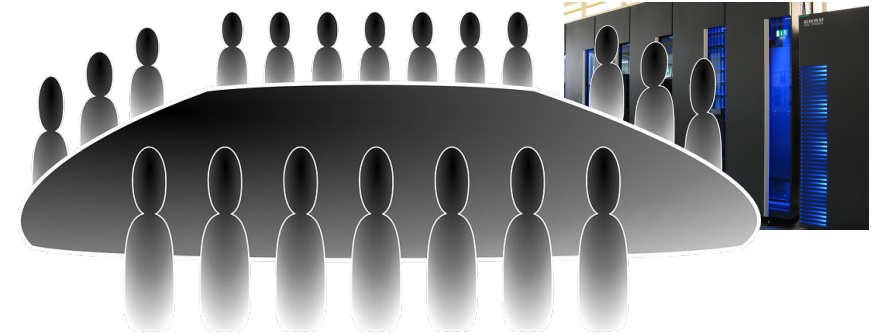
How to integrate: Integration Options

Three main integration options for Providers:

- **Direct usage (as-a-service):**
  - Support group or multiple groups
  - Implementation of custom workflows

  Use case: CESSDA

- **Ticket redirection:**
  - EOSC Helpdesk just a contact point which redirects tickets to provider's mailing list or ticket system

  Use case: EUDAT

- **Full integration**
  - Bidirectional synchronization of tickets in EOSC and provider's helpdesk
  - Prerequisite: provider's helpdesk and API in place

  Use case: EGI GGUS
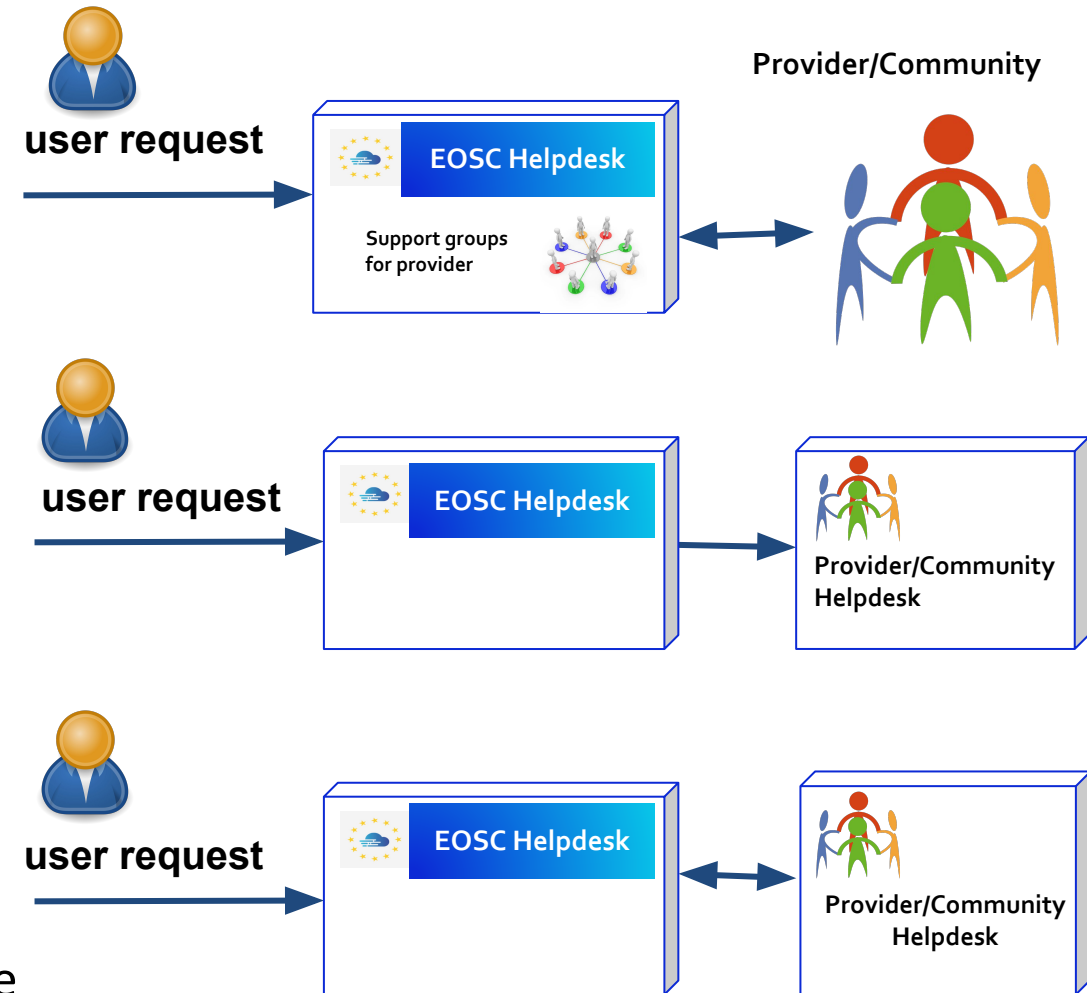
Onboarding/integration with Helpdesk in practice

1. Check KB documentation and integration options:
   https://eosc-helpdesk.eosc-portal.eu/help/

2. Choose an integration option

3. Send initial request using one of the methods:

Via E-mail:	help@eosc-portal.eu
Webform at	https://eosc-portal.eu/contact-us
Via helpdesk dashboard at	https://eosc-helpdesk.eosc-portal.eu
Via Telegram: @EOSC Helpdesk	https://t.me/EOSCHelpdesk_bot
Via Providers Dashboard extension	https://eosc-portal.eu/eosc-providers-hub

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Helpdesk Delivery as-a-Service

2 Options:

Helpdesk community space in EOSC Helpdesk

- **Portal for users with your domain** (feature available from April, 2023)
- **Multiple support groups**
- **Logo on login page and Dashboard** (feature available from April, 2023)

Helpdesk Instance

- **Full control & customization**
- **All Helpdesk functions available**

Helpdesk Delivery as-a-Service

Minimum configuration:

- Number of Support Groups with Names e.g.: "Catalog Support"
- Number of Agents per Group, access rights
- Email specs

Advanced configuration - Minimum configuration plus:

- Other submission methods: Webforms, Telegram..
- Escalation procedure: First response time, Update time
- Escalation calendar (public holidays, countries)
- Filters for incoming tickets
- Custom fields, email signatures, custom workflows etc.

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Helpdesk Delivery as-a-Service

Helpdesk Instance (Option will be available from April 2023)

- Full helpdesk functions
- Admin access
- Customization is done by provider
- Automatic backups
- Limited Support & Help
- Option for medium/big organizations

Full Integration (Provider operates own Helpdesk)

Option 1: Provider is using Zammad instance

Create a sync group e.g. **EOSC Support**

Add agent **EOSC Agent** for **EOSC Support group**

Share credentials for created **EOSC Agent** with EOSC Helpdesk

Option 2: Provider is using other type of Helpdesk Technology

Ensure that Helpdesk technology supports Rest API

Provide Rest API documentation to EOSC Helpdesk tech. team

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Integration procedure and implementation

Helpdesk as-a-service: 1-2 days for helpdesk space, 1 week - instance
1. Fix initial parameters (groups, agents, email, webforms)
2. Specs & requirements
3. Implementation & tests
4. Discussion, support and improvement

Forwarding (1-2 days)
1. Connect to Providers' Helpdesk E-mail
2. Test of redirection

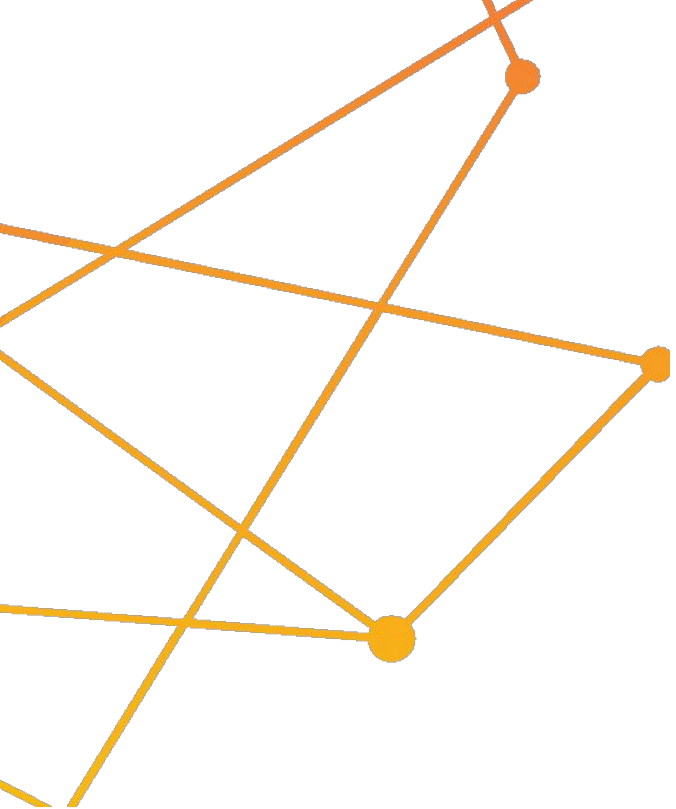**Full integration: 1 week for Zammad instance, 1-2 months for other**
1. Mapping of ticket fields
2. Specs & requirements
3. Implementation via API
4. Discussion, support and improvement

Data Privacy considerations

- Compliance with GDPR is important
- Depending on the integration type each integration will be accompanied with either:
  - Data Processing Agreement (DPA)
  - Joint Controller Agreement
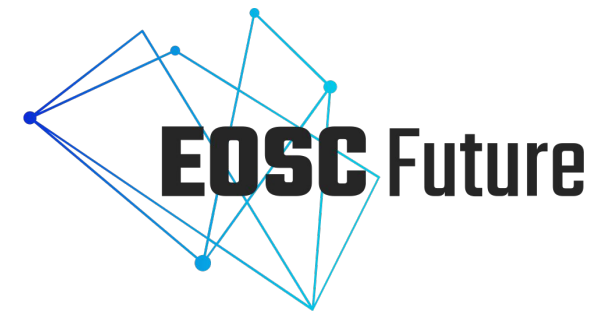
Example of Integration and First Experiences

CESSDA

- Consortium of European Social Science Data Archives
- 22 members and 1 observer country (Service Providers)
- 3 services Onboarded
  - [CESSDA Data Catalogue](#), CDC
  - [European Language Social Science Thesaurus](#), ELSST
  - [Data Management Expert Guide](#), DMEG
  - More…
- Core services integration
  - Monitoring
  - Helpdesk

CESSDA Helpdesk Use-case

Incident Management

Service Request Management

Requirement Gathering

Helpdesk Implementation

Model Use-cases

FitSM¹ Standard

- **Lightweight ITSM**
- **Suitable to RIs**
- **EOSC Defacto standard**
- **Easy templates**

ISRM Procedure

- **ISRM1: Record, classify, priorize**
- **ISRM2: Incident review**
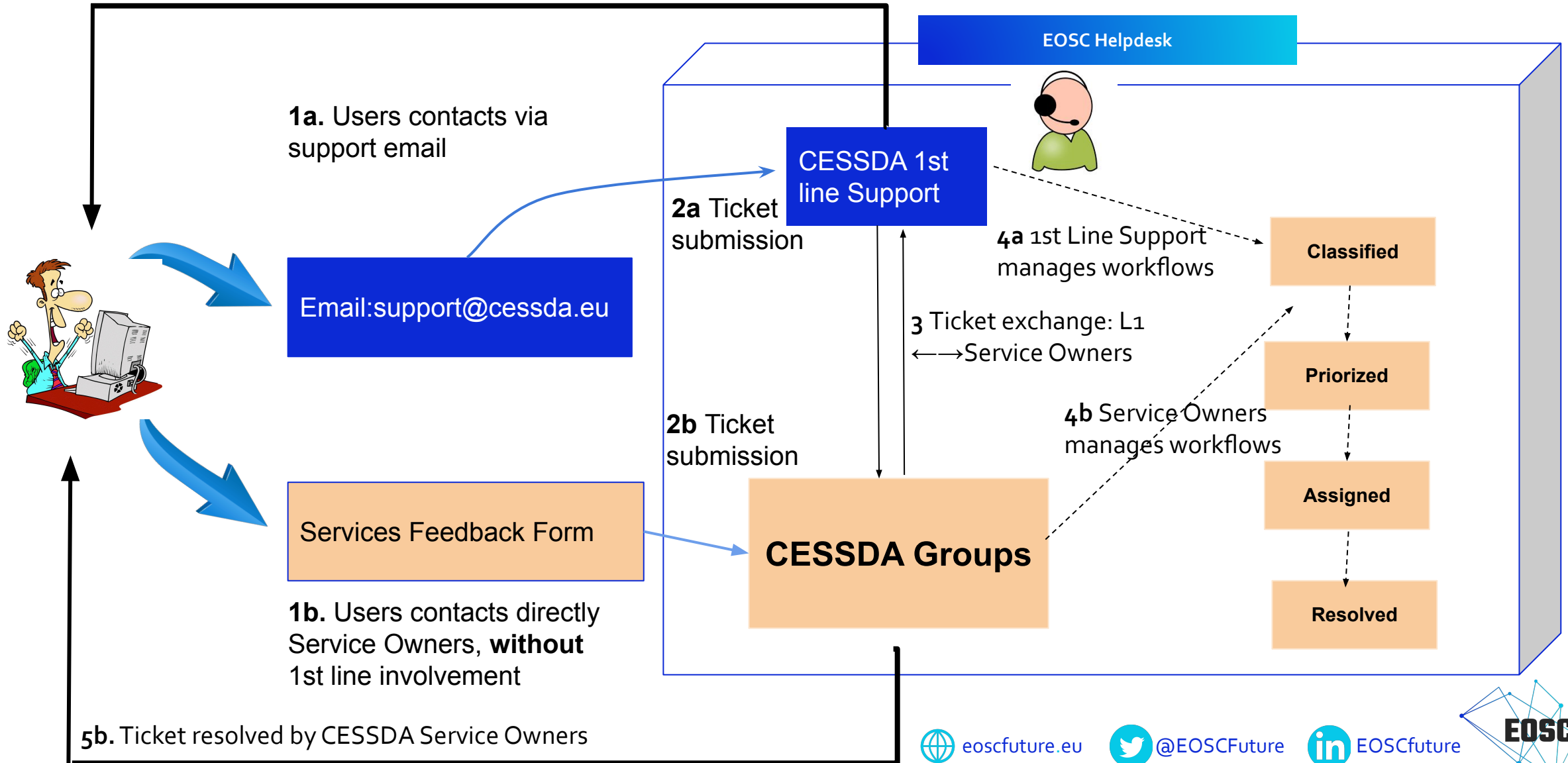- **ISRM3: Escalation procedures**
- **ISRM4: Incident management**

EOSC Helpdesk

- **Helpdesk as a Service**
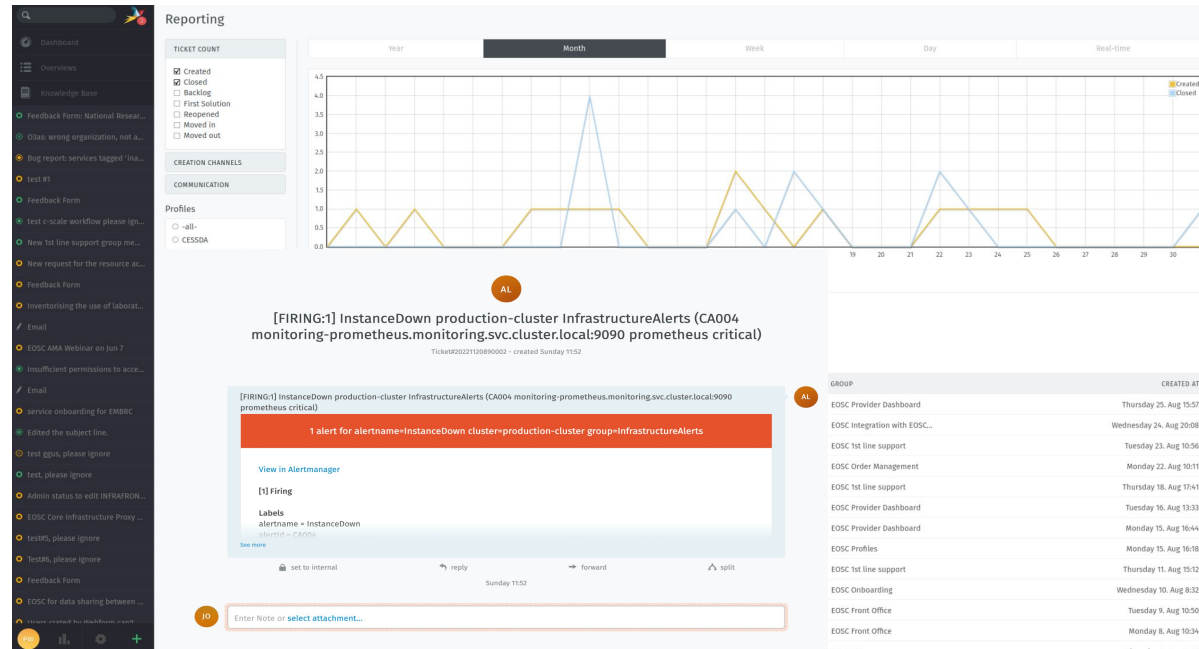- **Instance of helpdesk**

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Helpdesk: Typical Workflows

5a. Ticket resolved by 1st Line Support

EOSC Helpdesk

1a. Users contacts via support email

CESSDA 1st line Support

2a Ticket submission

4a 1st Line Support manages workflows

Email:support@cessda.eu

3 Ticket exchange: L1 ⟷ Service Owners

Classified

Priorized

2b Ticket submission

4b Service Owners manages workflows

Services Feedback Form

CESSDA Groups

Assigned

1b. Users contacts directly Service Owners, **without** 1st line involvement

Resolved

5b. Ticket resolved by CESSDA Service Owners

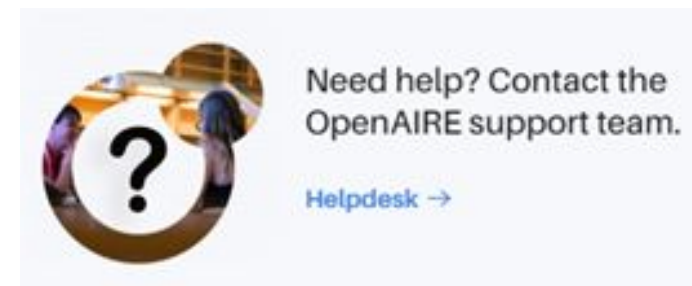eoscfuture.eu   @EOSCFuture   EOSCfuture

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Impression So far !

- Configurable
  - Trigger conditions
  - Workflows etc.
- Webforms integration
- Escalation procedures
- Reporting
- Data Privacy Concerns
  - DPA?

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OpenAIRE

Need help? Contact the OpenAIRE support team.
Helpdesk →

- **23 services Onboarded**
(https://marketplace.eosc-portal.eu/providers/eosc.openaire)

- **Open Science Helpdesk Service since 2012**

  ○ Supporting EC policies and OA in european countries by NOADs

  ○ Support and guidance on the portfolio of Services

- Technical solution:

  ○ Before we used an extension of Joomla with a decentralized approach and recently we moved to Zammad.

Use case slides from André Vieira and Pedro Principe (OpenAIRE/University of Minho)

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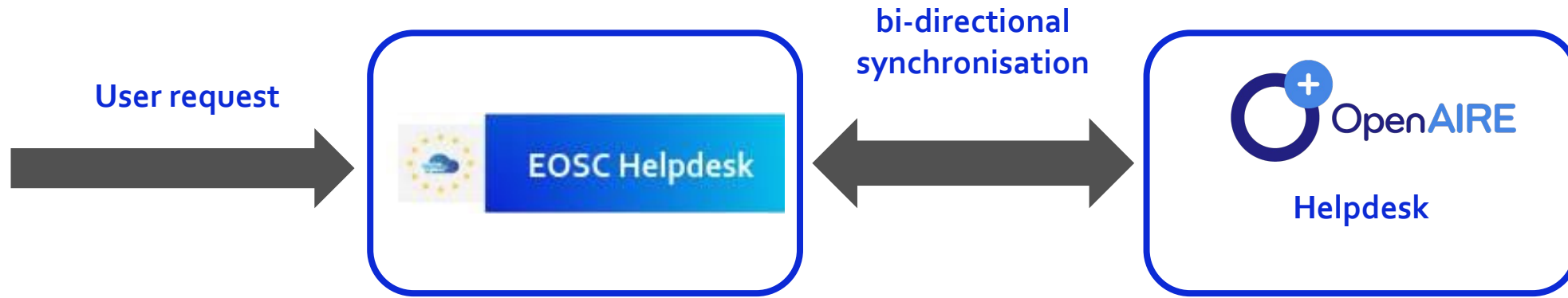
OpenAIRE Helpdesk Use-case

Software: Zammad

- Easy to use / configure

- Groups/Queues by service

- User permissions by Group (Agents)

- Triggers: highly customizable to set up automated actions on tickets

- Distinct channels to receive tickets: Web, Form, Email, Microsoft 365, …

- Reporting

OpenAIRE Helpdesk Use-case

Full integration with EOSC Helpdesk
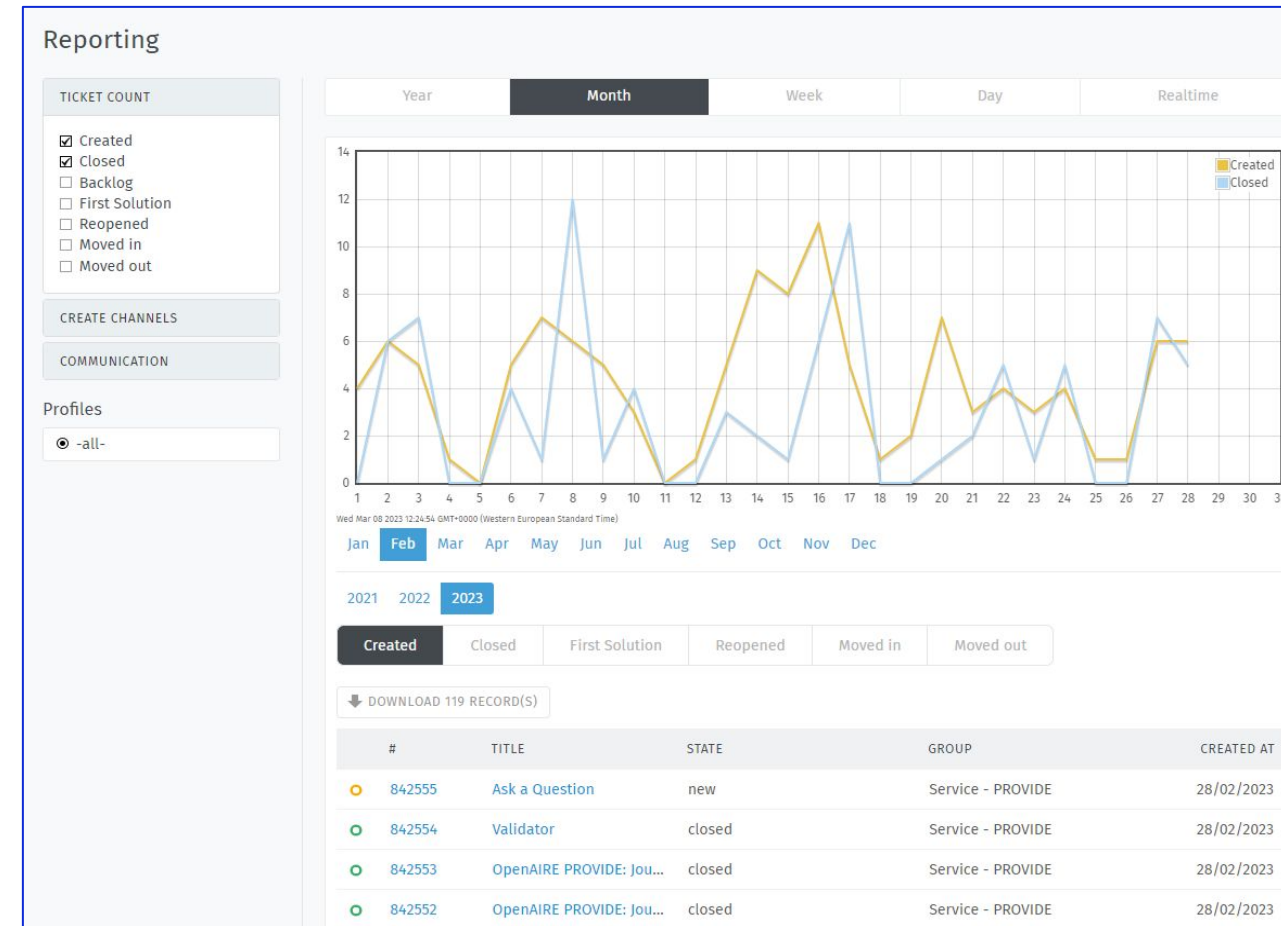
User request → EOSC Helpdesk ← bi-directional synchronisation → OpenAIRE Helpdesk

Main reason for adopting this solution:
- Zammad software is used by both Helpdesk systems, facilitating the integration process.

Advantages:
- **Full bi-directional synchronisation between EOSC Helpdesk and OpenAIRE Helpdesk systems.**
- **Seamless ticket management in both systems.**
- **It ensures a timely response to user requests, whatever the entry point.**

OpenAIRE Helpdesk Use-case

Full integration with EOSC Helpdesk

Bi-directional synchronisation

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Q&A and Discussion

Thank you!
Contact: pavel.weber@kit.edu

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