

# New WLCG helpdesk. Status and plans.

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GGUS - the Helpdesk



**Ticket search engine**

Did you know...

- Documentation
- Registration
- Data Protection
- Terms of use

My dashboard

- Search ticket
- Submit ticket
- Support staff
- Logout

Ticket ID ?

Support Unit  show more SU options

Status ?

Concerned VO ?

Notified site

CMS SU

CMS Site

creation date

UNTOUCHED SINCE

Advanced search attributes

Ticket category  MoU Area

Priority  Scope ?

Type of issue  Order tickets by:

Special attributes  Tickets per page:

User ?

Pattern search ?  Show columns in search result:

Involved support ?

Assigned to person ?

[show/save search result as CSV](#) | [XML](#)

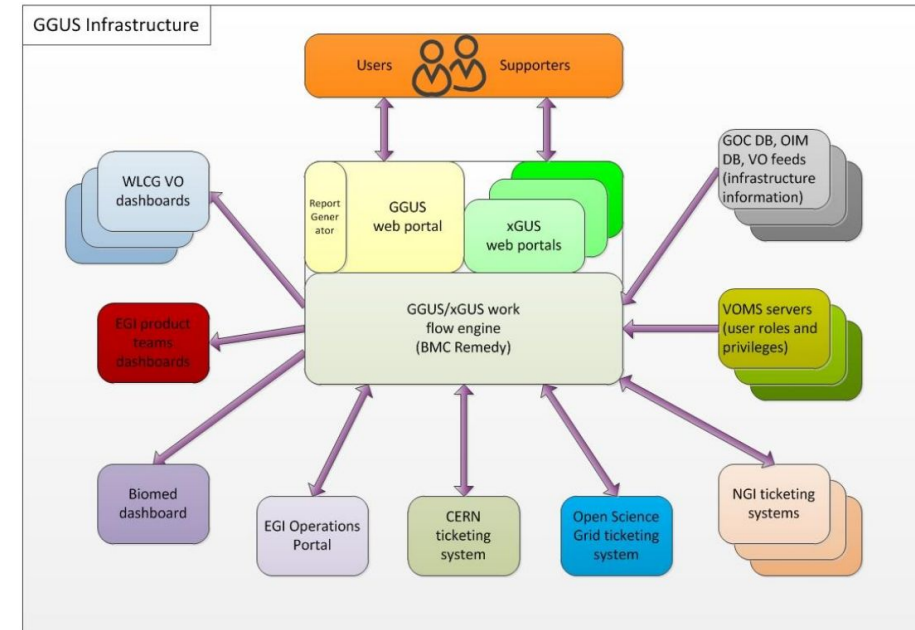
29 of 29 Tickets

Ticket-ID	Type	VO	Site	Priority	Resp. Unit	Status	Last Update	Subject	Scope
166753		none		less urgent	Check-in (AAI)	assigned	2024-05-10	Delete some manually created groups for ...	EGI
166751		ops		less urgent	TPM	new	2024-05-10	Update Virtual Appliance ID	EGI
166750	<b>Team</b>	belle	BNL-Belle-II	urgent	USBELLE	assigned	2024-05-10	HTCondor-CEs mapfiles to contain ...	WLCG
166749		cms	JINR-LCG2	urgent	ROC_Russia + involved	in progress	2024-05-10	SAM test failure at T2_RU_JINR	WLCG
166748		cms	CIT_CMS_T2	urgent	USCMS	assigned	2024-05-09	File transfer failure at T2_US_Caltech	WLCG
166747	<b>Team</b>	atlas	CERN-PROD	top priority	ROC_CERN	assigned	2024-05-10	T0 export to the grid has 0% efficiency ...	WLCG
166744		cms		less urgent	Helpdesk (GGUS)	assigned	2024-05-08	Permission to submit ALARM tickets on ...	WLCG
166743		cms		urgent	VOSupport	assigned	2024-05-08	change queue for arce02.esc.qmul.ac.uk ...	WLCG
166742		cms	UERJ	urgent	USCMS	assigned	2024-05-08	no CE SAM test on T2_BR_UERJ	WLCG
166741		other		less urgent	Benchmarking	in progress	2024-05-08	Significant improvement of HEPscore23 ...	EGI
166739		other		less	WI CG IPv6	assigned	2024-05-09	RO-14-ITIM implementinn IPv6 only Grid ...	EGI

# Part 1: GGUS retirement

# GGUS retirement

- Over 20 years of stable operations ( ~200k tickets)
- Many integrations with other systems →
- Served **WLCG** and **EGI**
- Strategic decision to replace it with new system which meets current requirements of WLCG and EGI
- Step-by-step retirement process
  - Parallel running of both new/old systems
  - Gradual migration of support units, roles etc.
- Stop at the end of 2024
- Read-only mode after





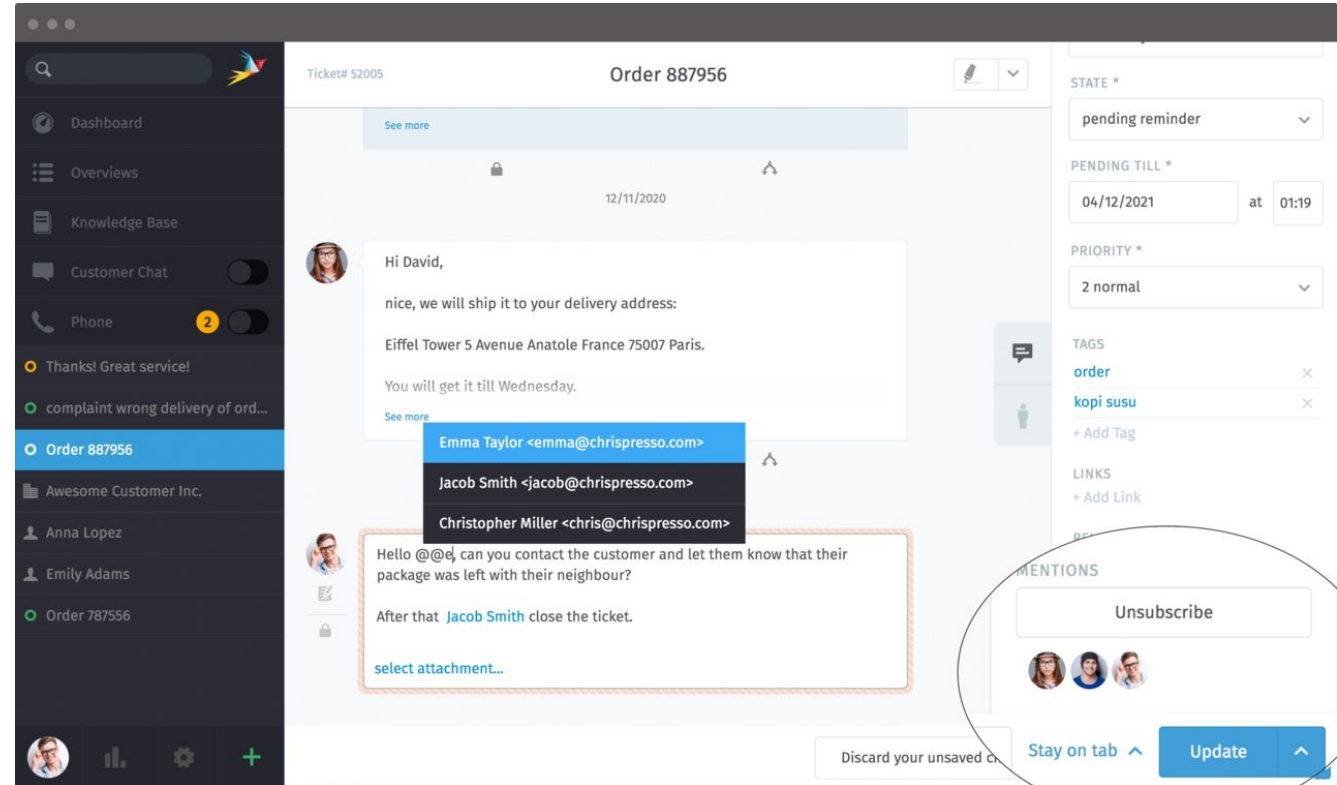
## Part 2: New Helpdesk Technology

# New Helpdesk Technology



Open-source rapidly  
developed technology  
Zammad

Custom workflows (filters,  
automatic ticket assignment  
automatic escalation procedure,  
notifications)  
Elasticsearch  
Easy to integrate

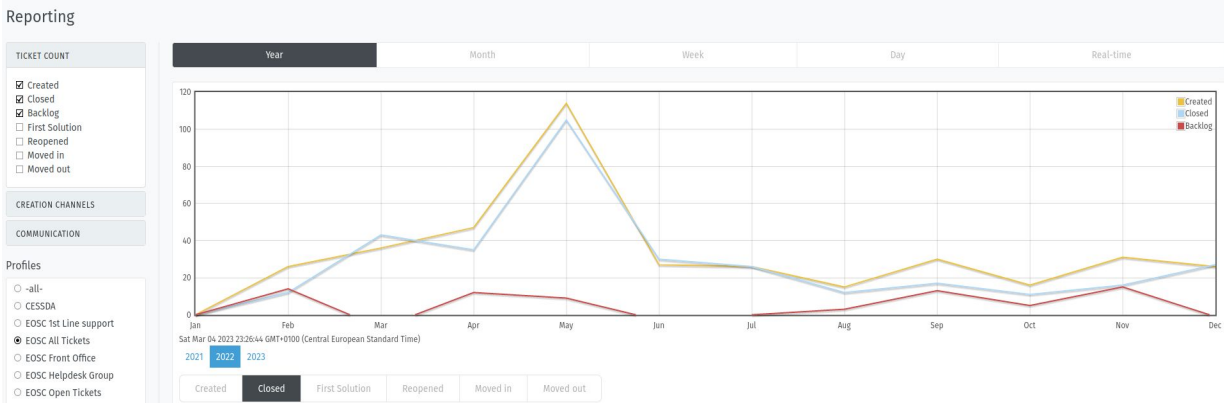


The screenshot displays the Zammad helpdesk interface. On the left is a dark sidebar with navigation options: Dashboard, Overviews, Knowledge Base, Customer Chat, and Phone. The main area shows a ticket for 'Order 887956' with a message from Emma Taylor dated 12/11/2020. The message content is: 'Hi David, nice, we will ship it to your delivery address: Eiffel Tower 5 Avenue Anatole France 75007 Paris. You will get it till Wednesday.' Below the message, a dropdown menu shows three user avatars: Emma Taylor, Jacob Smith, and Christopher Miller. A text box contains a message: 'Hello @@@, can you contact the customer and let them know that their package was left with their neighbour? After that Jacob Smith close the ticket.' The right sidebar contains metadata for the ticket, including STATE (pending reminder), PENDING TILL (04/12/2021 at 01:19), PRIORITY (2 normal), TAGS (order, kopi susu), and LINKS. At the bottom right, there is an 'Unsubscribe' button and a 'Mentions' section with three user avatars.

# New Helpdesk Technology



Detailed build-in statistics and reporting



Security features

- S/MIME Support
- Access history
- Connected Devices

S/MIME

S/MIME (Secure/Multipurpose Internet Mail Extensions) is a widely accepted method (or more precisely, a protocol) for sending digitally signed and encrypted messages.

Certificates & Private Keys

SUBJECT	HASH	FINGERPRINT	CREATED	EXPIRES	ACTIONS
/C=DE/ST=Berlin/L=Germany/O=THA-Systems/OU=IT/CN=support@chrispresso.com/emailAddress=support@chrispresso.com	fa20bcf0	242767242a...	2020-06-1 2 14:45:00	2024-06-1 2 14:45:00	⋮
/C=DE/ST=Berlin/L=Germany/O=THA-Systems/OU=IT/CN=sales@chrispresso.com/emailAddress=sales@chrispresso.com	20be9043	bc68ff0c16...	2020-06-1 2 14:44:00	2024-06-1 2 14:44:00	⋮
/C=DE/ST=Berlin/L=Germany/O=Zammad GmbH/OU=IT/CN=sample@example.com/emailAddress=sample@example.com	b9703b3	b49277070a...	2021-09-07 16:14:00	2030-06-02 16:00:00	⋮
/C=DE/ST=Berlin/L=Germany/O=Awesome Customer Inc/OU=IT/CN=anna@example.com/emailAddress=anna@example.com	c58aa7e4	c6c02fd59e...	2021-09-07 17:00:00	2025-09-07 17:00:00	⋮

Download Certificate

Delete

Add Certificate | Add Private Key

Default Behavior

Choose the default behavior of the S/MIME integration on per group basis. If signing or encrypting is not possible, the setting has no effect. Agents call always manually alter the behavior for each article.

GROUP	SIGN	ENCRYPTION
2nd Level	yes	yes

# New Helpdesk Technology

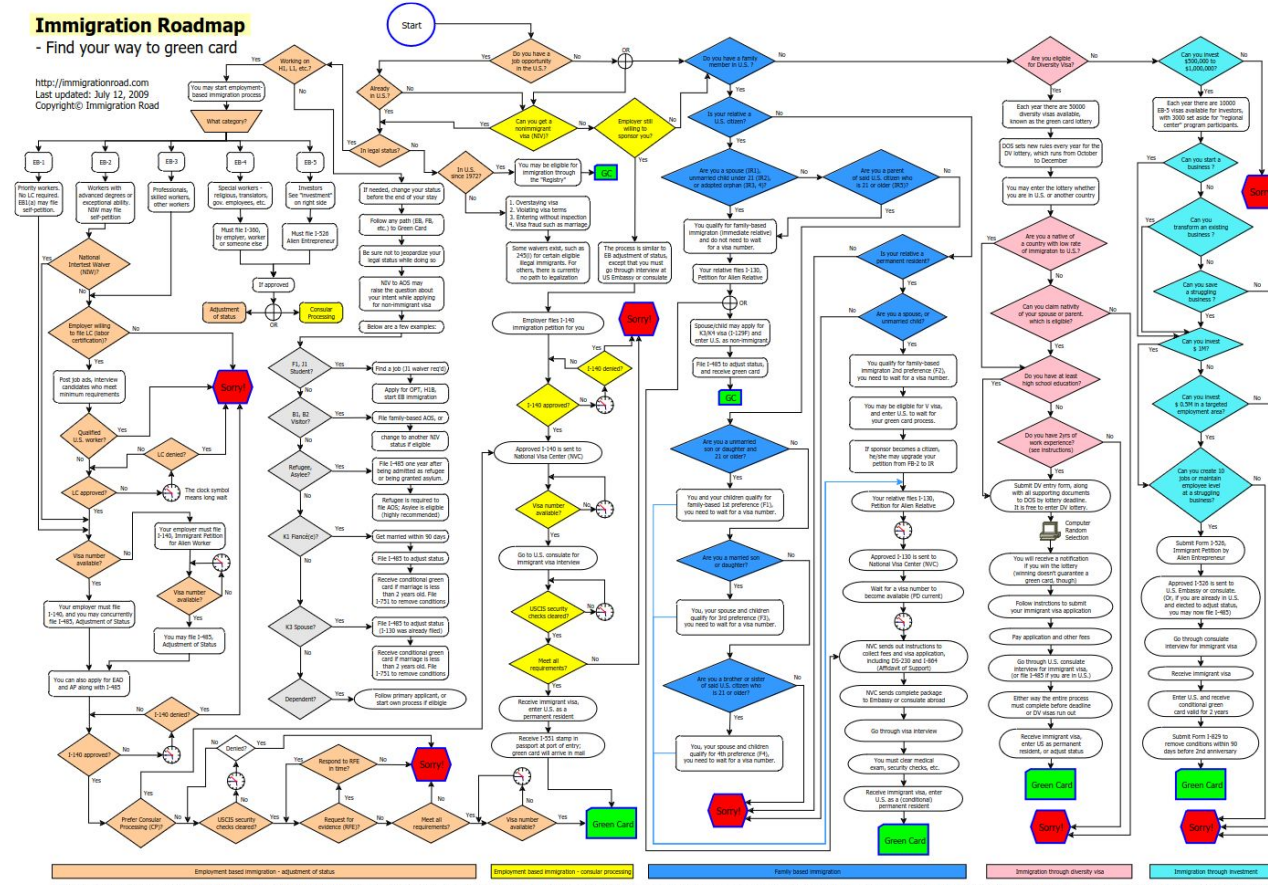
- Zammad fits best to *peculiar* requirements of WLCG for ticketing system, which is not a standard Helpdesk ( Customer  $\longleftrightarrow$  Support Staff):
  - to support synchronous work of many groups, institutions, divisions and to enable **structured communication** and collaboration
  - Scalability
  - Support units hierarchy
  - Multiple ticket types
  - Complex notification scheme





### Immigration Roadmap - Find your way to green card

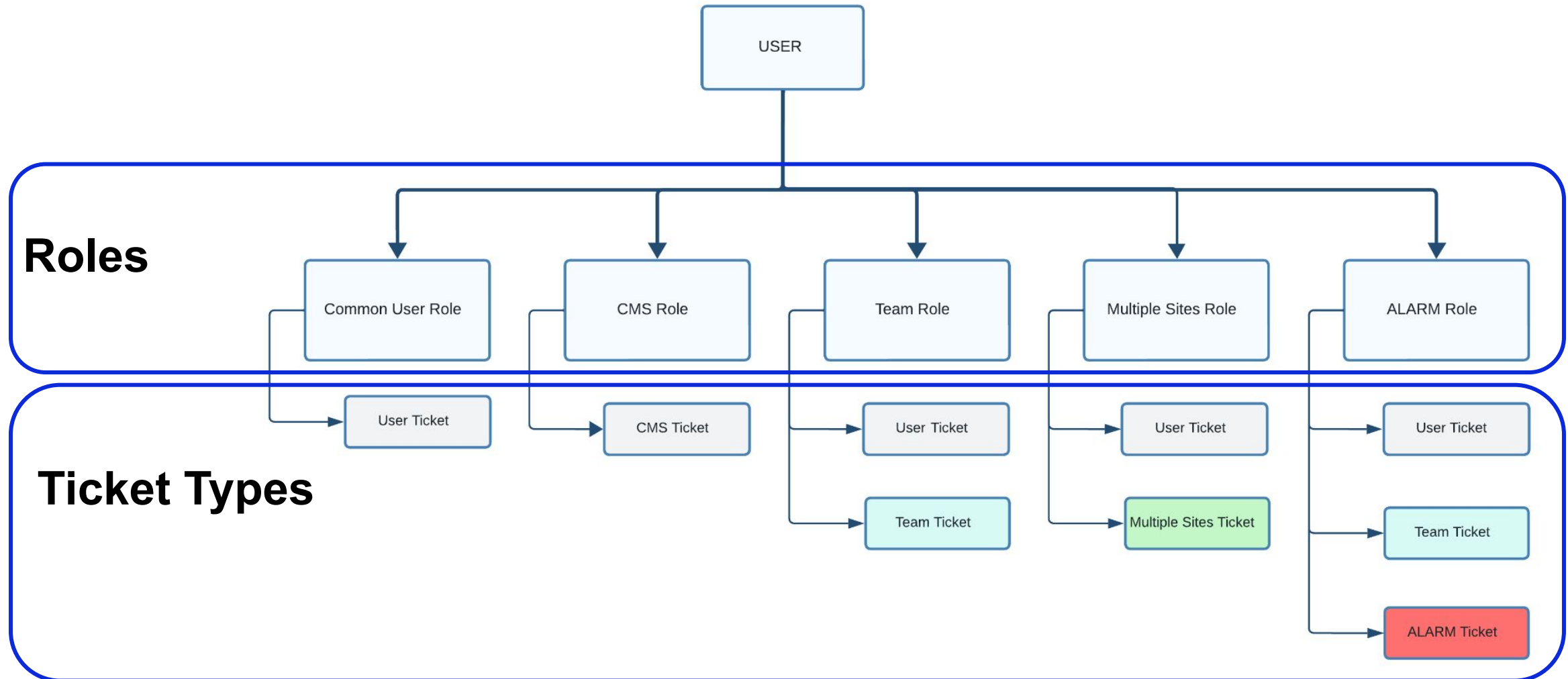
http://immigrationroad.com  
Last updated: July 12, 2009  
Copyright© Immigration Road



Disclaimer: This immigration roadmap is for general guidance only and does NOT constitute legal advice. U.S. immigration laws and regulations are ever changing, so always confirm with USCIS and/or consult a qualified professional with regard to your case. No warranty is made regarding the accuracy of any information; not all possible ways to GC are covered by this flowchart, and applications to respond are not included. This may start multiple processes if your are eligible.

# Part 3: Major WLCG Workflows

# Roles and Ticket Types

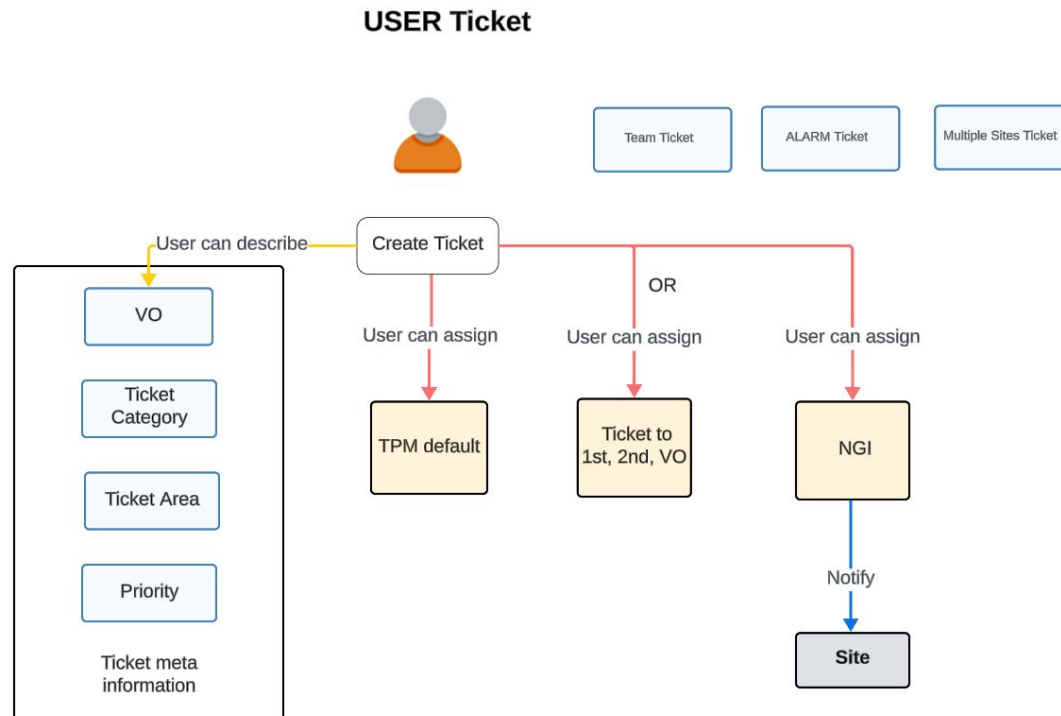


# Workflows Examples

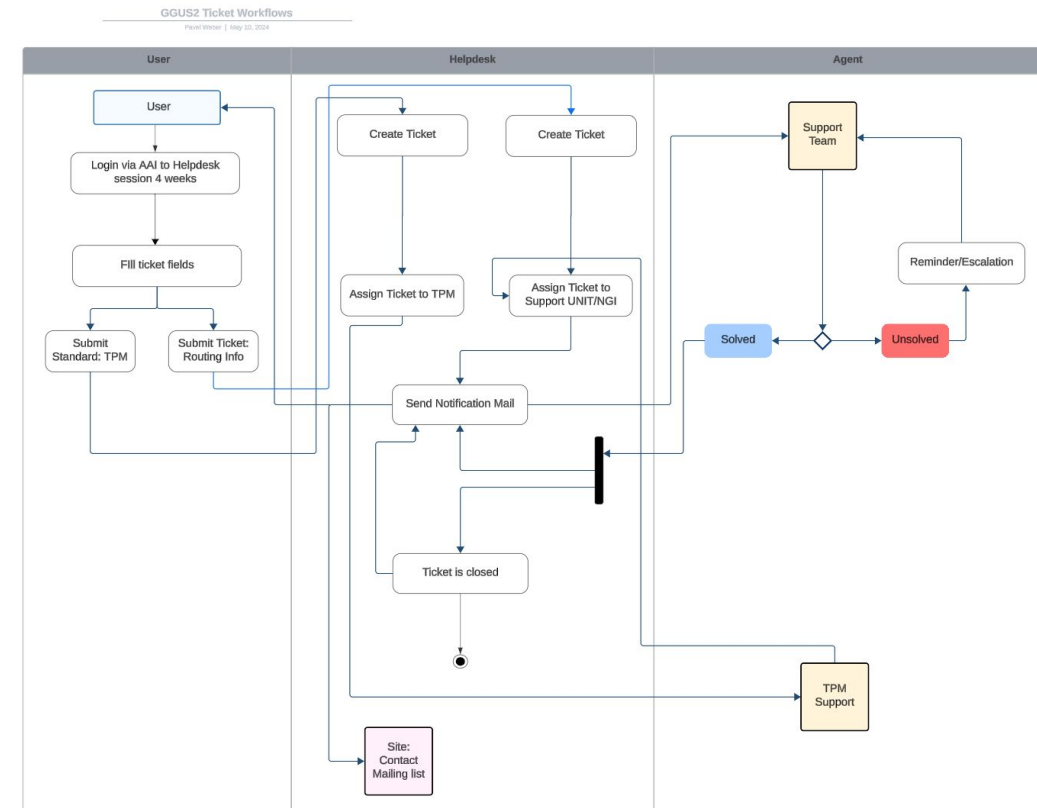
High-level diagram: User ticket

**ACTIONS**

- describe
- Assign
- Notify



Activity diagram: user ticket

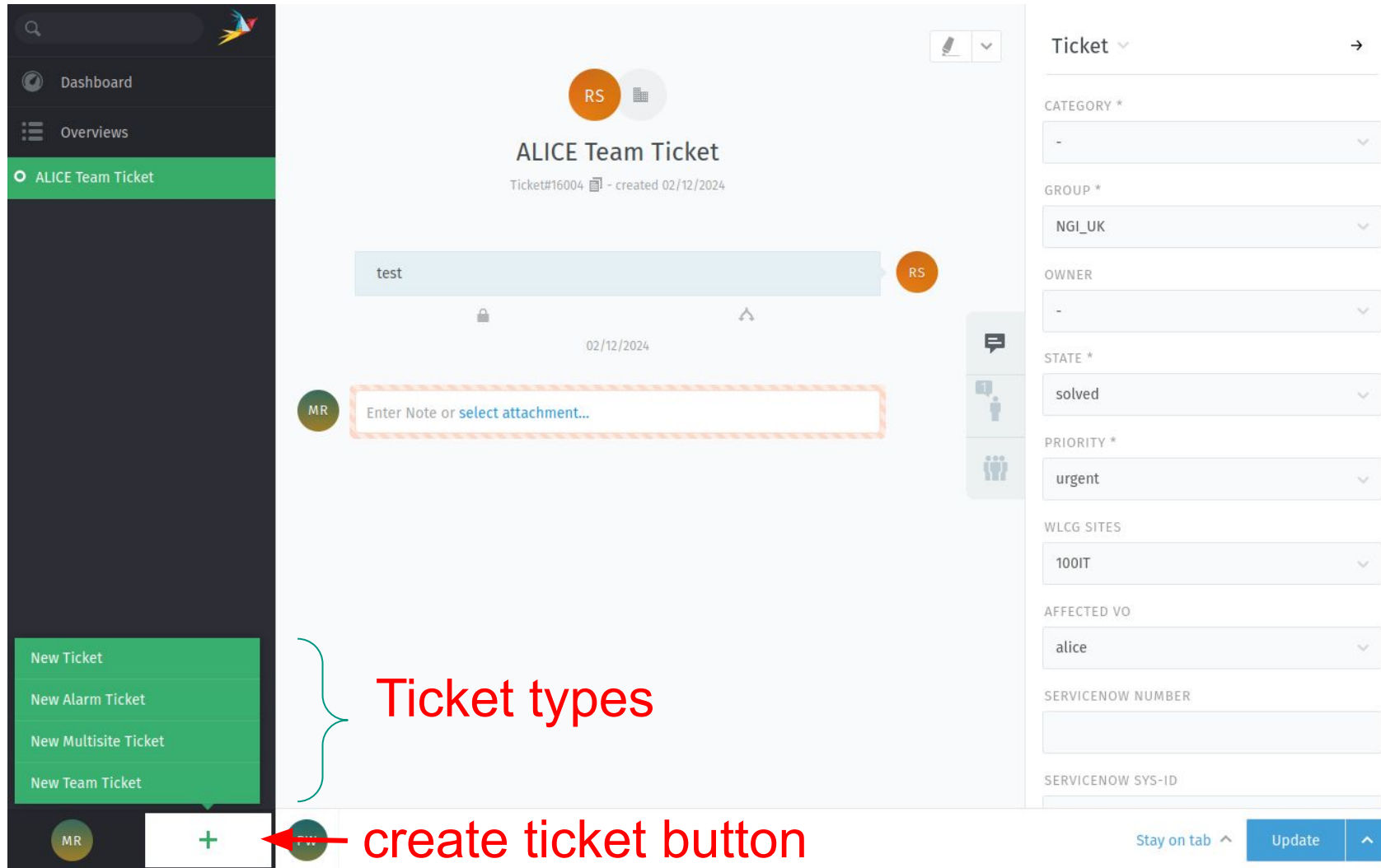




# Current Status

- Core workflow development is almost done:
  - User, Team, Alarm workflows are in place
  - Multisites Workflow - to be accomplished
  - CMS Workflow is under discussion
  - Improvements, bugfixes based on tests and feedback
- Test Instance is deployed and running : <https://helpdesk-dev.ggus.eu/>
- Production Instance is defined: <https://helpdesk.ggus.eu>
- E-Mail for migration period: [help@ggus.eu](mailto:help@ggus.eu)
- Integration activities:
  - AAI integration is done for test instance (SAML)
  - CERN ServiceNow integration - to be finalized
  - FNAL ServiceNow integration is planned

# Interface Examples: Ticket types

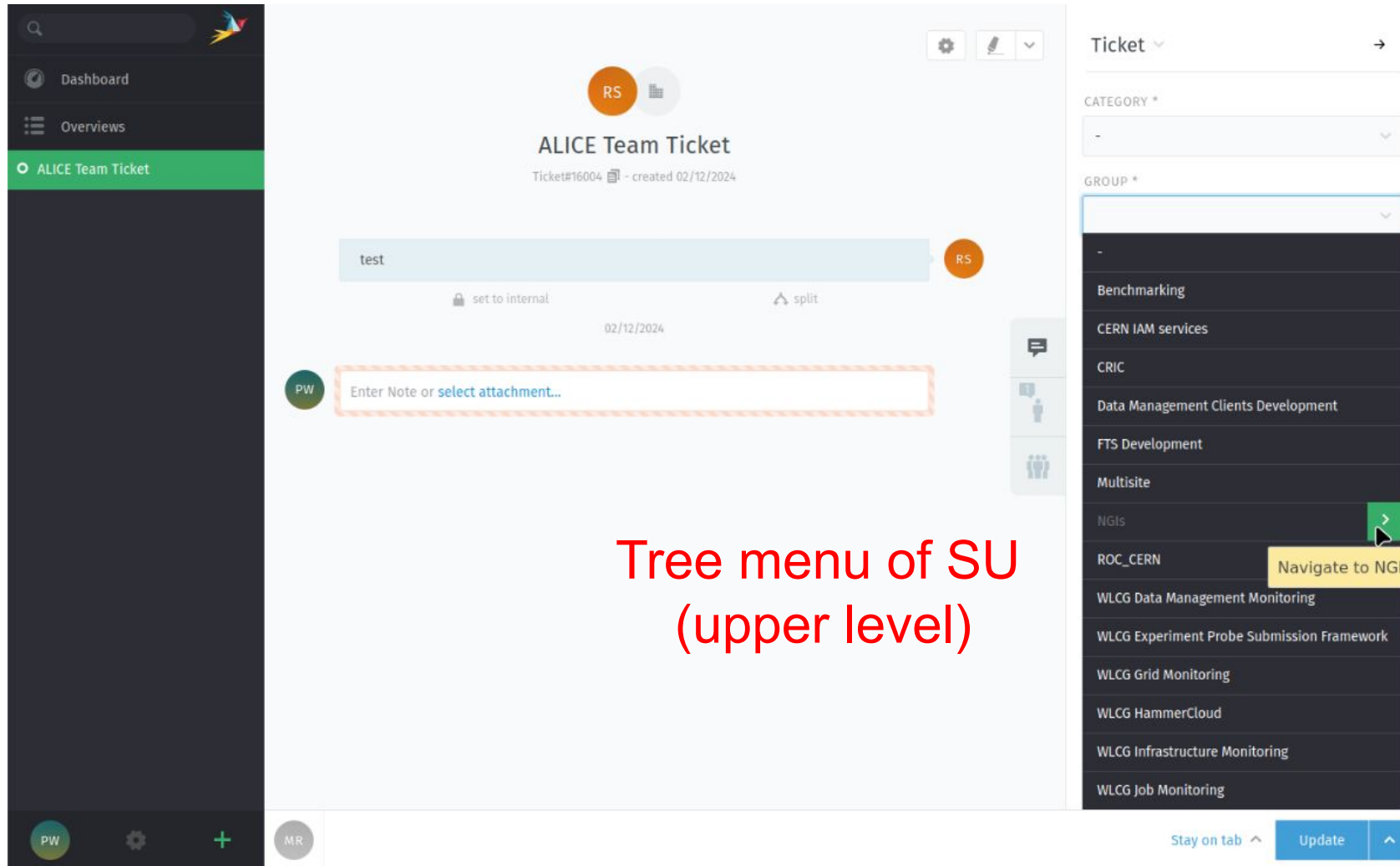


The screenshot displays a ticket management interface. On the left is a dark sidebar with a menu containing 'Dashboard', 'Overviews', and 'ALICE Team Ticket'. Below the menu is a 'New Ticket' section with options for 'New Alarm Ticket', 'New Multisite Ticket', and 'New Team Ticket'. At the bottom of the sidebar is a 'create ticket button' represented by a white square with a green plus sign. The main area shows a ticket titled 'ALICE Team Ticket' (Ticket#16004) created on 02/12/2024. It features a message box with the text 'test' and a note input field with the placeholder 'Enter Note or select attachment...'. On the right, a 'Ticket' details panel includes dropdown menus for 'CATEGORY \*', 'GROUP \*' (set to 'NGI\_UK'), 'OWNER', 'STATE \*' (set to 'solved'), 'PRIORITY \*' (set to 'urgent'), 'WLCG SITES' (set to '100IT'), and 'AFFECTED VO' (set to 'alice'). There are also input fields for 'SERVICENOW NUMBER' and 'SERVICENOW SYS-ID'. At the bottom right of the main area are buttons for 'Stay on tab ^', 'Update', and an upward arrow.

Ticket types

create ticket button

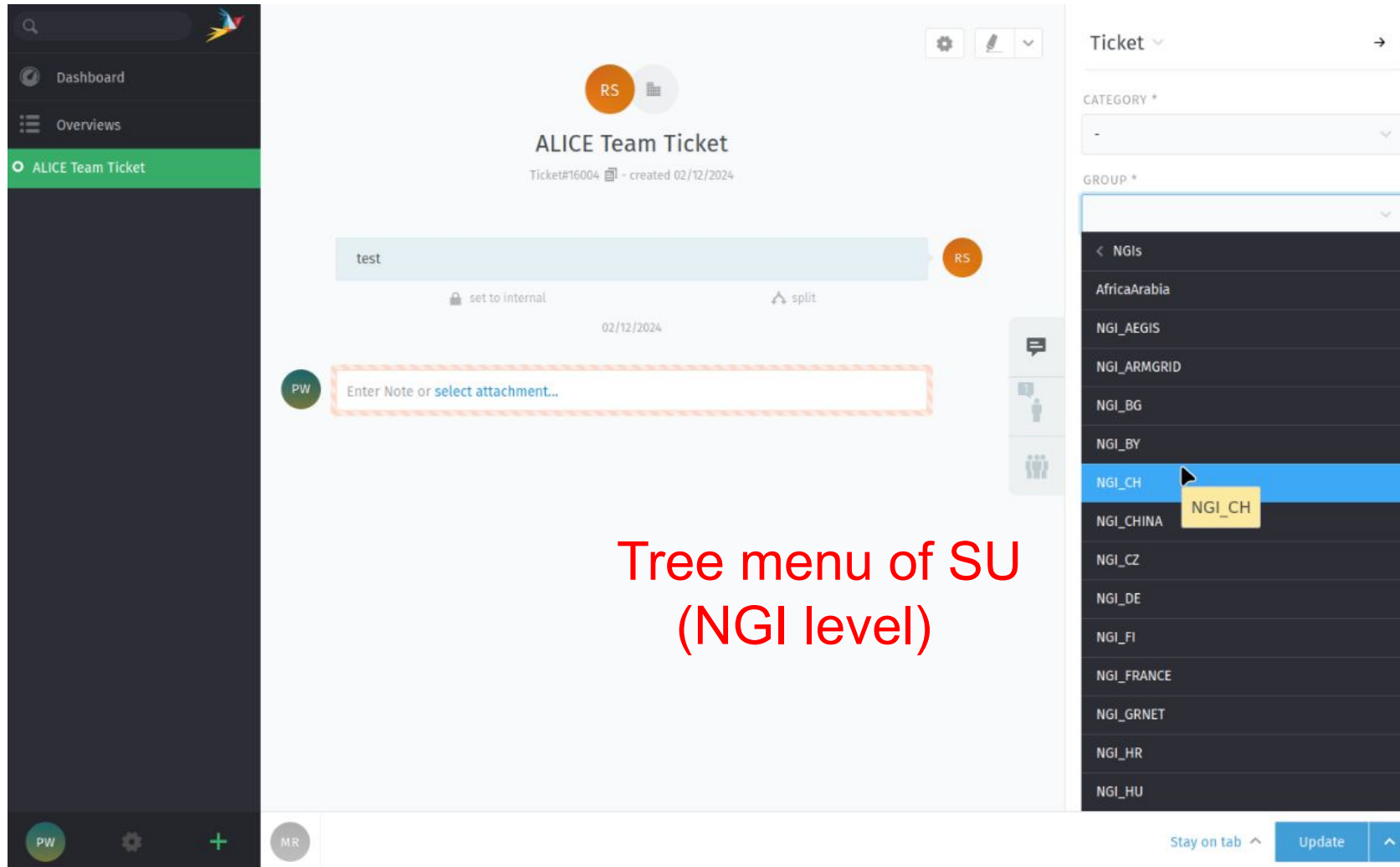
# Interface Examples: Tree menus



The screenshot displays a ticket management interface. On the left is a dark sidebar with a search icon and menu items: 'Dashboard', 'Overviews', and 'ALICE Team Ticket' (highlighted in green). The main content area shows a ticket titled 'ALICE Team Ticket' (Ticket#16004, created 02/12/2024) with a 'test' message and a 'PW' user profile. A red dashed box highlights the 'Enter Note or select attachment...' input field. On the right, a 'Ticket' dropdown menu is open, showing a list of categories and groups. The 'NGIs' group is highlighted with a yellow callout box that says 'Navigate to NGIs'. Other groups listed include 'Benchmarking', 'CERN IAM services', 'CRIC', 'Data Management Clients Development', 'FTS Development', 'Multisite', 'ROC\_CERN', 'WLCG Data Management Monitoring', 'WLCG Experiment Probe Submission Framework', 'WLCG Grid Monitoring', 'WLCG HammerCloud', 'WLCG Infrastructure Monitoring', and 'WLCG Job Monitoring'. At the bottom right, there are buttons for 'Stay on tab', 'Update', and a refresh icon.

**Tree menu of SU  
(upper level)**

# Interface Examples: Tree menus



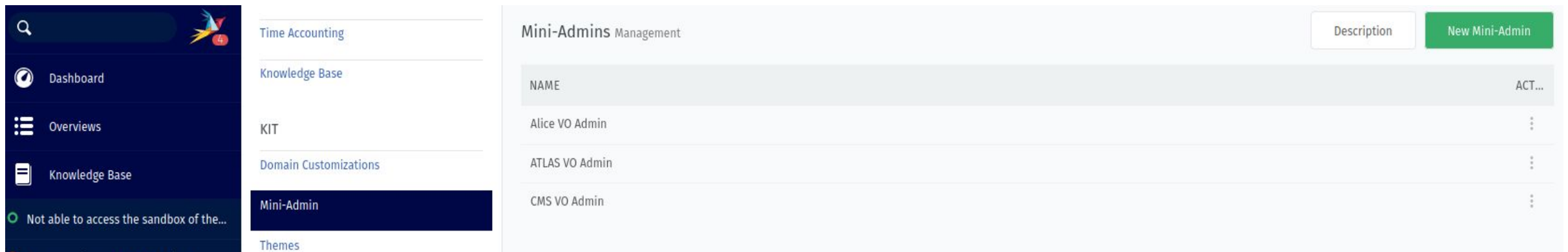
The screenshot displays a web interface for managing tickets. On the left, a dark sidebar contains a search icon, 'Dashboard', 'Overviews', and 'ALICE Team Ticket' (highlighted in green). The main content area shows a ticket titled 'ALICE Team Ticket' (Ticket#16004) created on 02/12/2024. A light blue note with the text 'test' is visible, along with buttons for 'set to internal' and 'split'. Below the note is a text input field with a dashed orange border and the placeholder text 'Enter Note or select attachment...'. On the right, a 'Ticket' dropdown menu is open, showing a 'GROUP \*' list. The list includes 'NGIs', 'AfricaArabia', 'NGI\_AEGIS', 'NGI\_ARMGRID', 'NGI\_BG', 'NGI\_BY', 'NGI\_CH' (highlighted in blue), 'NGI\_CHINA', 'NGI\_CZ', 'NGI\_DE', 'NGI\_FI', 'NGI\_FRANCE', 'NGI\_GRNET', 'NGI\_HR', and 'NGI\_HU'. A yellow tooltip with 'NGI\_CH' is visible over the highlighted item. At the bottom right of the ticket form, there are buttons for 'Stay on tab', 'Update', and an upward arrow.

Tree menu of SU  
(NGI level)



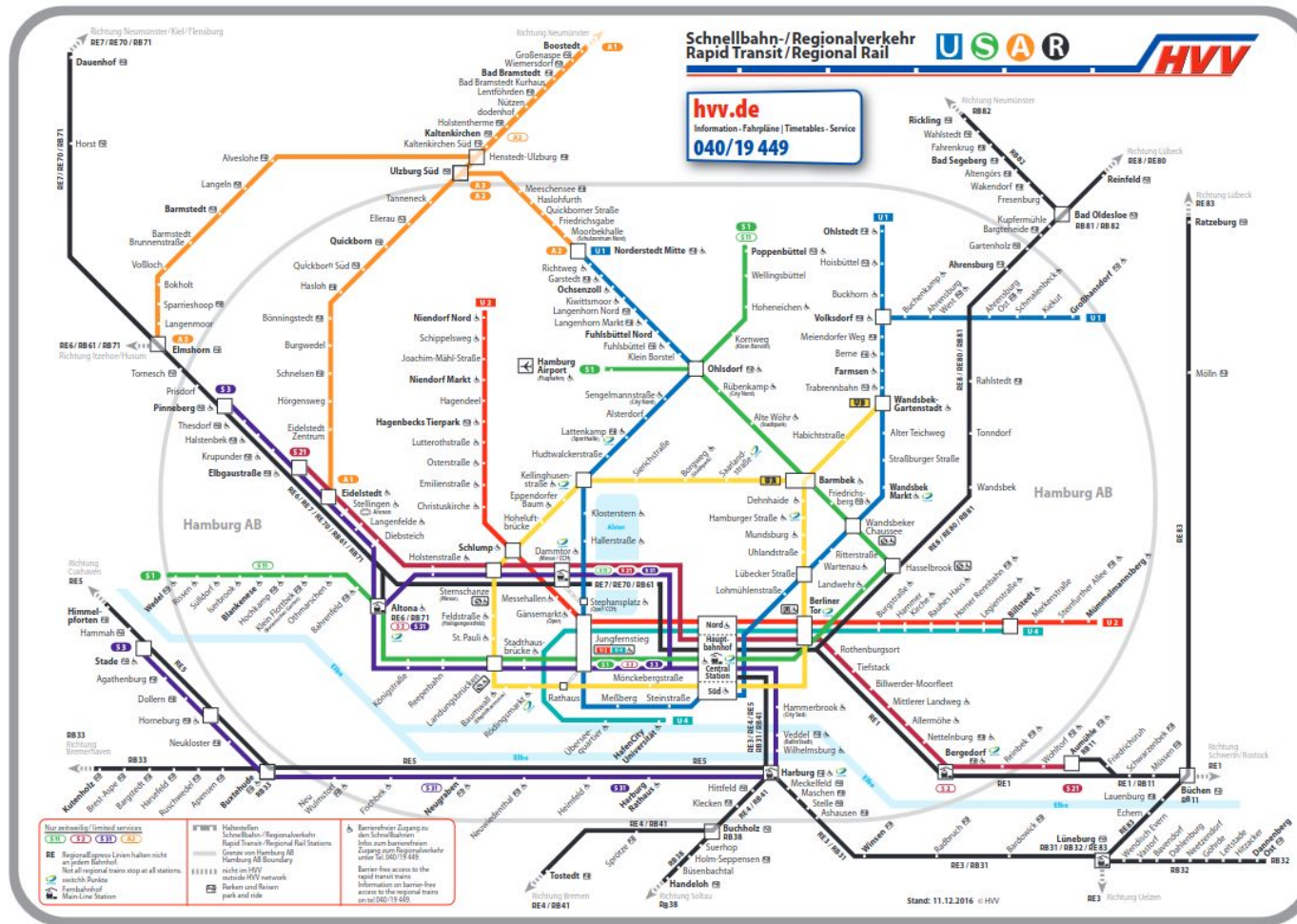
# Distributed Role Management: Mini admins

- Goal: enable VOs to manage the roles and permissions of their users
- Distributed role management - no central bottle-neck
- Each VO nominate several privileged members for mini-admin role in GGUS.
  
- Mini-admin:
  - can give GGUS users different roles e.g. Team, ALARM etc.
  - gain view on all users and roles in the dedicated VO



The screenshot shows a web interface for 'Mini-Admins Management'. On the left is a dark sidebar with navigation items: Dashboard, Overviews, Knowledge Base, and a notification 'Not able to access the sandbox of the...'. The main content area has a top navigation bar with 'Description' and 'New Mini-Admin' buttons. Below is a table with columns 'NAME' and 'ACT...'. The table lists three entries: 'Alice VO Admin', 'ATLAS VO Admin', and 'CMS VO Admin', each with a vertical ellipsis icon in the 'ACT...' column.

NAME	ACT...
Alice VO Admin	⋮
ATLAS VO Admin	⋮
CMS VO Admin	⋮



# Part 4: Roadmap and Migration

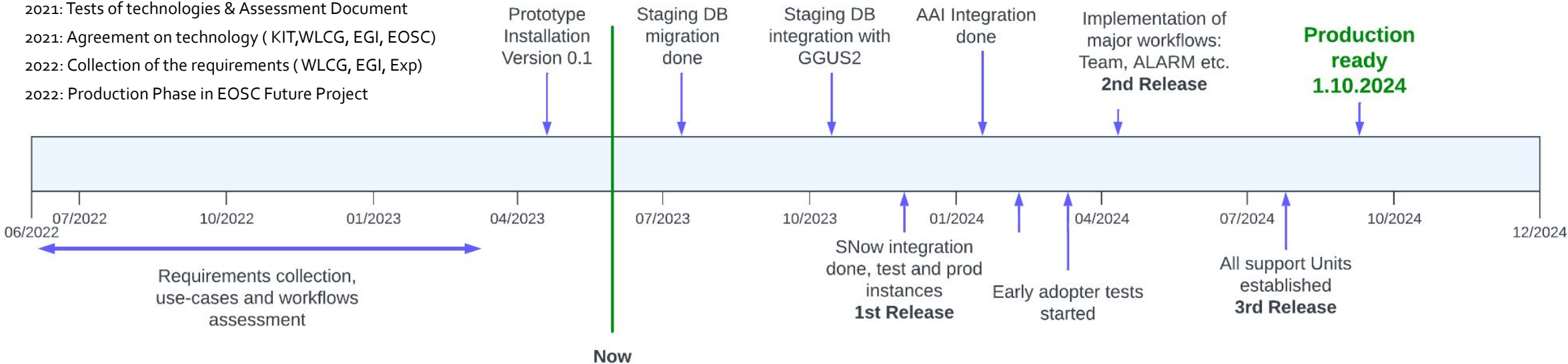
# Migration Status and Roadmap



Roadmap presented at GDB Meeting 06.2023

Date: 21.06.2023

- 2021: Tests of technologies & Assessment Document
- 2021: Agreement on technology (KIT,WLCG, EGI, EOSC)
- 2022: Collection of the requirements (WLCG, EGI, Exp)
- 2022: Production Phase in EOSC Future Project

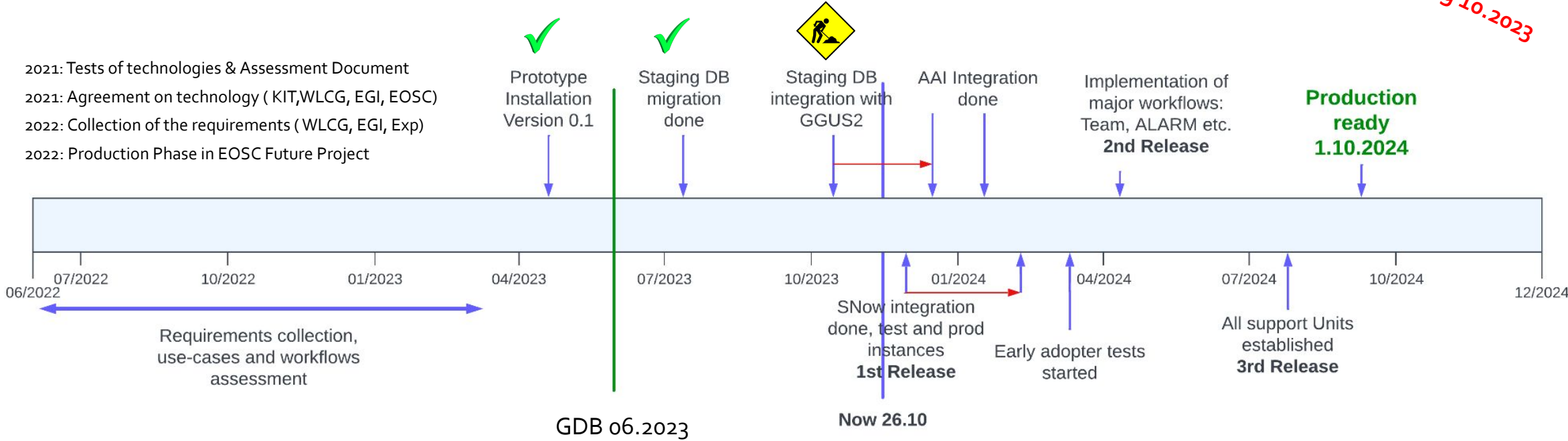


# Migration Status and Roadmap



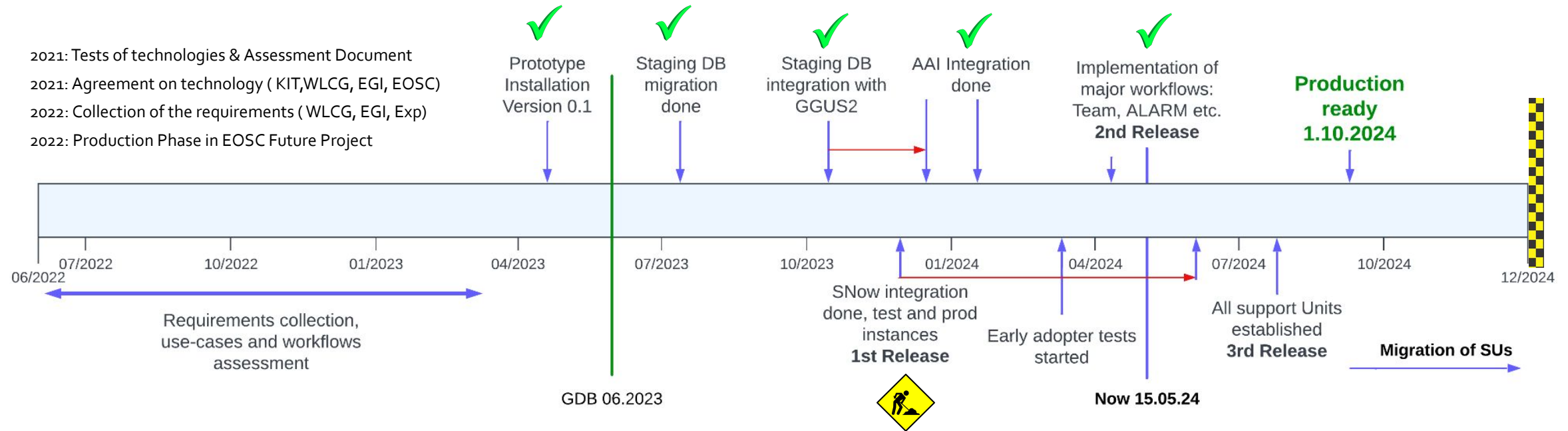
Roadmap presented at OMB Meeting 10.2023

Date: 26.10.2023



# Migration Status and Roadmap

Date: 15.05.2024



# Migration of SUs and Users

- Before 1.10.24 pilot phase, early adopters are welcome
- After 1.10.24 migration of SUs
- Everyone will be invited to join new GGUS
- Actions for users to do after announcement:
  - Login to the helpdesk
  - Check roles and permissions → request new if needed
  - Test it and provide feedback
- A few training and QA sessions are planned in October and November
- All Documentation and migration status:

<https://confluence.egi.eu/display/EGIHLPDSK/EGIHLPDSK+Home>

# Conclusions and Outlook

- The implementation of GGUS core workflows is almost done
- The integration with ServiceNow to be finalized soon
- That was the easiest part
- The challenging phase starting now:
  - Pilot tests
  - Early adopters
  - Migration
  - Operation & Acceptance by WLCG community

**Thank you!**  
**Contact: [pavel.weber@kit.edu](mailto:pavel.weber@kit.edu)**