

Enhancing National Research Data Accessibility through FEGA Environment

Jorge Oliveira (IST, BioData.pt)
Jorge Silva (UAveiro, BioData.pt)
22 Novembro 2024



- *Why do **we need FEGA**?*
 - *European laws, including **GDPR**, impose strict regulations on the storage and sharing of sensitive genomic data.*
 - *Data must remain decentralized and managed within each region's infrastructure.*
 - *A **federated system is essential to comply with local laws while enabling secure data sharing.***

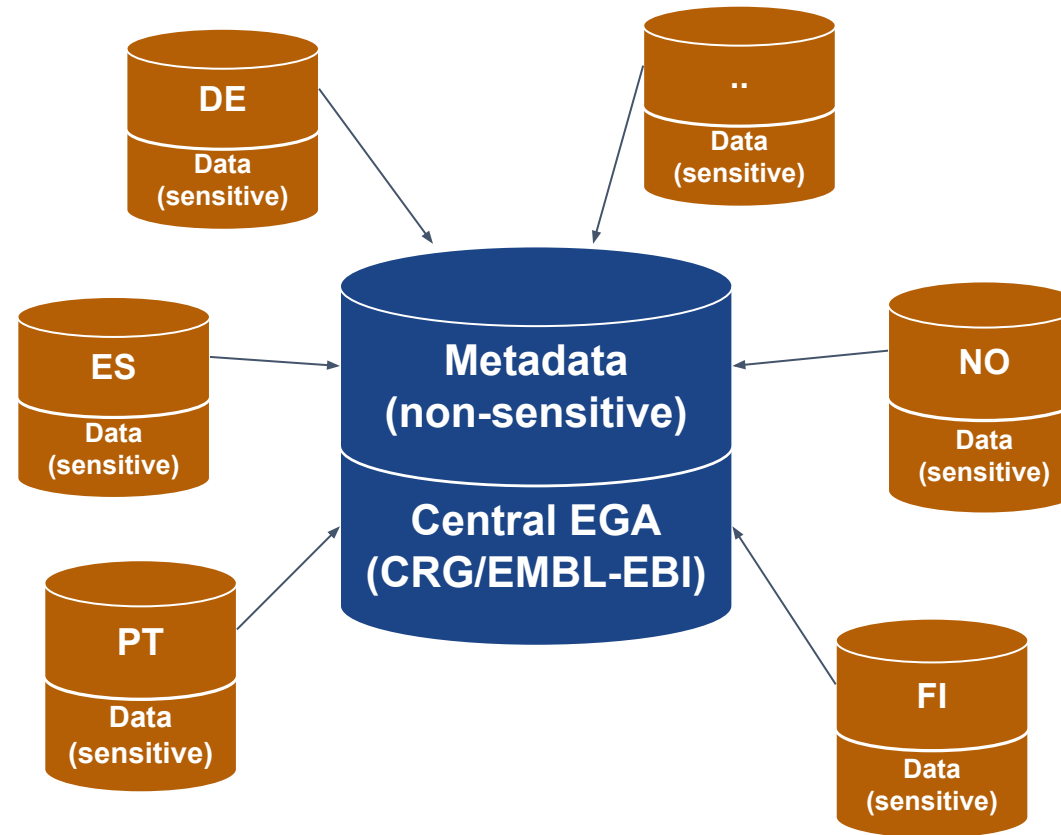
- *What type of data?*
 - *Personally identifiable **genetic and phenotypic data** resulting from biomedical **research projects.***





ABOUT FEDERATED EGA

The Federated EGA is the primary global resource for discovery and access of **sensitive human omics** and associated data consented for secondary use, through a network of national human data repositories to accelerate disease research and improve human health.



INTRODUCTION

- **Secure** way to store Genomic and associated phenotypic data
- Protects **sensitive data**
- **Simple** to use, includes several **tools** to **submit, access** and **download** data
- Taylor built for **Genomics**
- Developed and used standards approved by **GA4GH**
 - Crypt4GH
- Recognized by journals as a **trustworthy** repository
- Elixir Core Data Resource
 - **Sustainable**
 - Constantly being improved





ABOUT FEDERATED EGA

Status as of 21 Feb 2024



Central EGA



Data available



Signed FEGA Collaboration Agreement



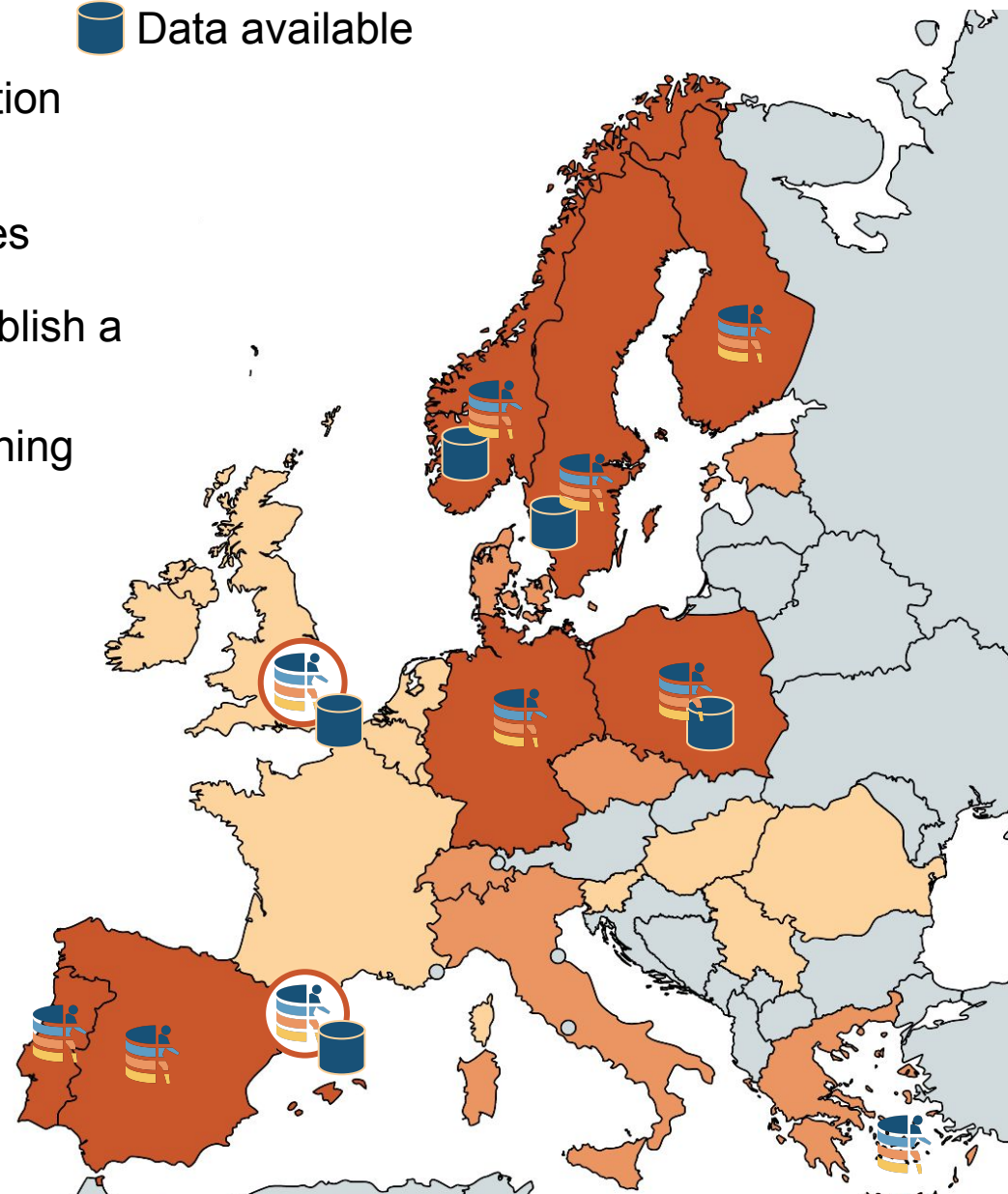
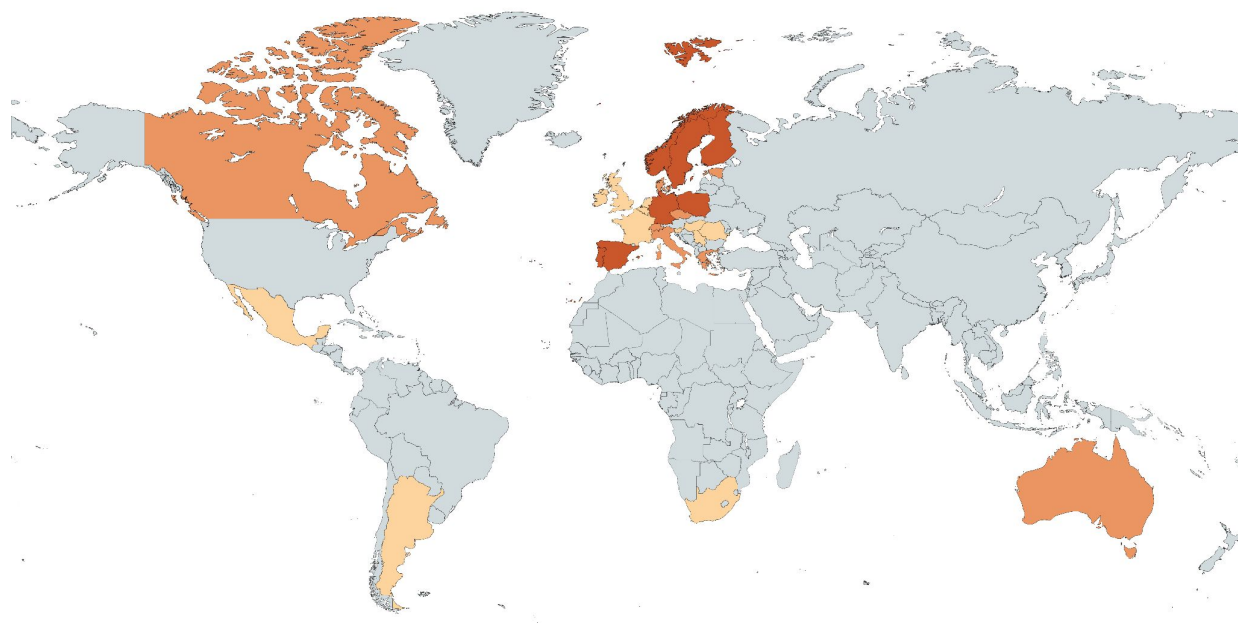
Joined FEGA Committees



Engaged in work to establish a FEGA node



Expressed interest in joining FEGA Network



CORE FUNCTIONALITIES



Data Search



Data Submission



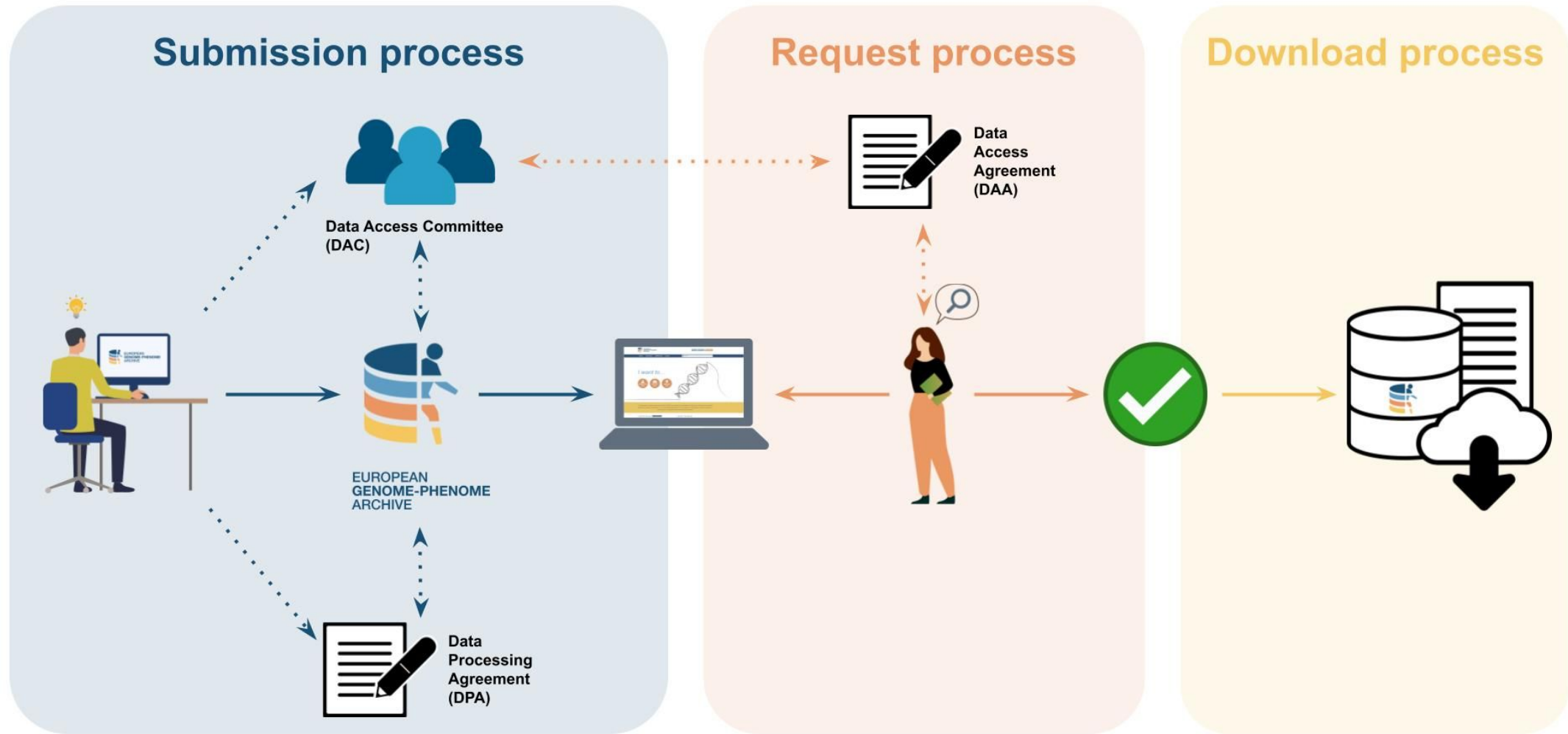
Data Request



**Download &
Visualization**



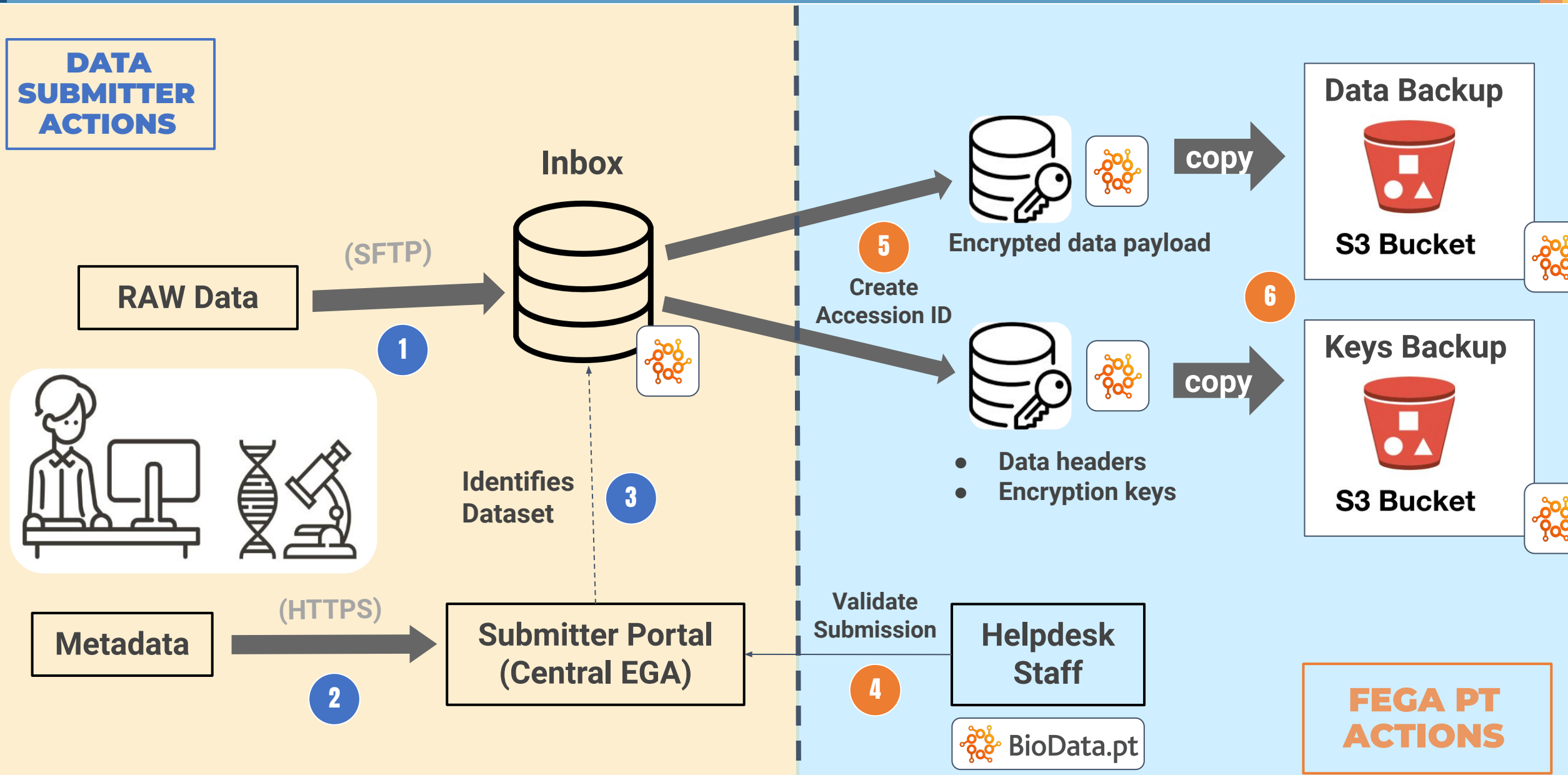
CORE FUNCTIONALITIES





SUBMISSION FLOW

DATA SUBMITTER ACTIONS



CONCLUSION



EASY TO USE



SECURE



**FULL CONTROL
OF DATA**



SUSTAINABLE

