



# Contact tracing and warning apps and the European Federation Gateway Service (EFGS)

IPEN Webinar on Contact Tracing apps - 21 October 2020  
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## The COVID context



Contact tracing allows public health authorities to break chains of infections between citizens, by testing and isolating those who are at risk.

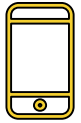
Most Member States have launched a national contact tracing and warning app to complement manual contract tracing measures.



The setup of the European Federation Gateway Service enables these national apps to talk to each other, and to help break cross-border infection chains.

The aim of the eHealth Network was to design a solution that contributes to the interruption of infection chains, while preserving the privacy of the users.

## Work on interoperability in the eHealth Network



The setup of the EFGS is the result of the collaboration between the Member States, with the support of the Commission, which connects national authorities responsible for eHealth. Several milestones have been achieved between the Member States and the Commission:

- The EU Toolbox on a common approach for contact tracing apps, by the eHealth Network (April)
- [Commission guidance on data protection](#) (April)
- Interoperability guidance setting out the interoperability requirements (May)
- Technical specifications for a common gateway solution (EFGS) to the interoperability challenge (June)
- Adoption of the Implementing Decision setting out the modalities for processing personal data in the EFGS (July)



## Contact tracing and warning app: how does it work



Contact tracing and warning apps, the use of which is voluntary, can warn users if they have been in proximity to a person who is reported to have been tested positive of COVID-19.

In practice, users install the application on their phone. After giving consent to use Bluetooth for proximity detection, the app will start generating temporary keys, which are arbitrary identifiers. These keys are exchanged via Bluetooth between phones at short distance running a contact tracing app.



If a user gets a positive COVID-19 diagnosis, their public health authority will ask him to **confirm this through the app**. At that moment, the electronic contact tracing triggers an **alert** to the people with whom he has been in contact.

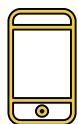
The contacts will be notified and will be advised on the steps to follow - to self-quarantine, get tested or contact the health authority.

## Contact tracing and warning app: state of play

### Apps State of play (updated on 23 September)

	Decentralised	Centralised	Total
Online	AT, IT, LV, DE, PL, DK, IE, HR, ES, NL, FI, EE, PT, MT (BE)	FR	16
Development	LT, CY, CZ		3
TOTAL	18	1	19
To be confirmed	SK, BG, EL, SI, HU		5
Not planned	LU, SE, RO		3
Suspended	NO		1

## EFGS: how does it work



The gateway enables **national apps' to exchange information and to alert users about a potential exposure to infected user – regardless of the app they are using.**

When a user reports a positive diagnosis, they upload their 'keys' to the backend server supporting the app. Those keys are then distributed to other users of the app, whose devices then check if they have been in proximity to that person.

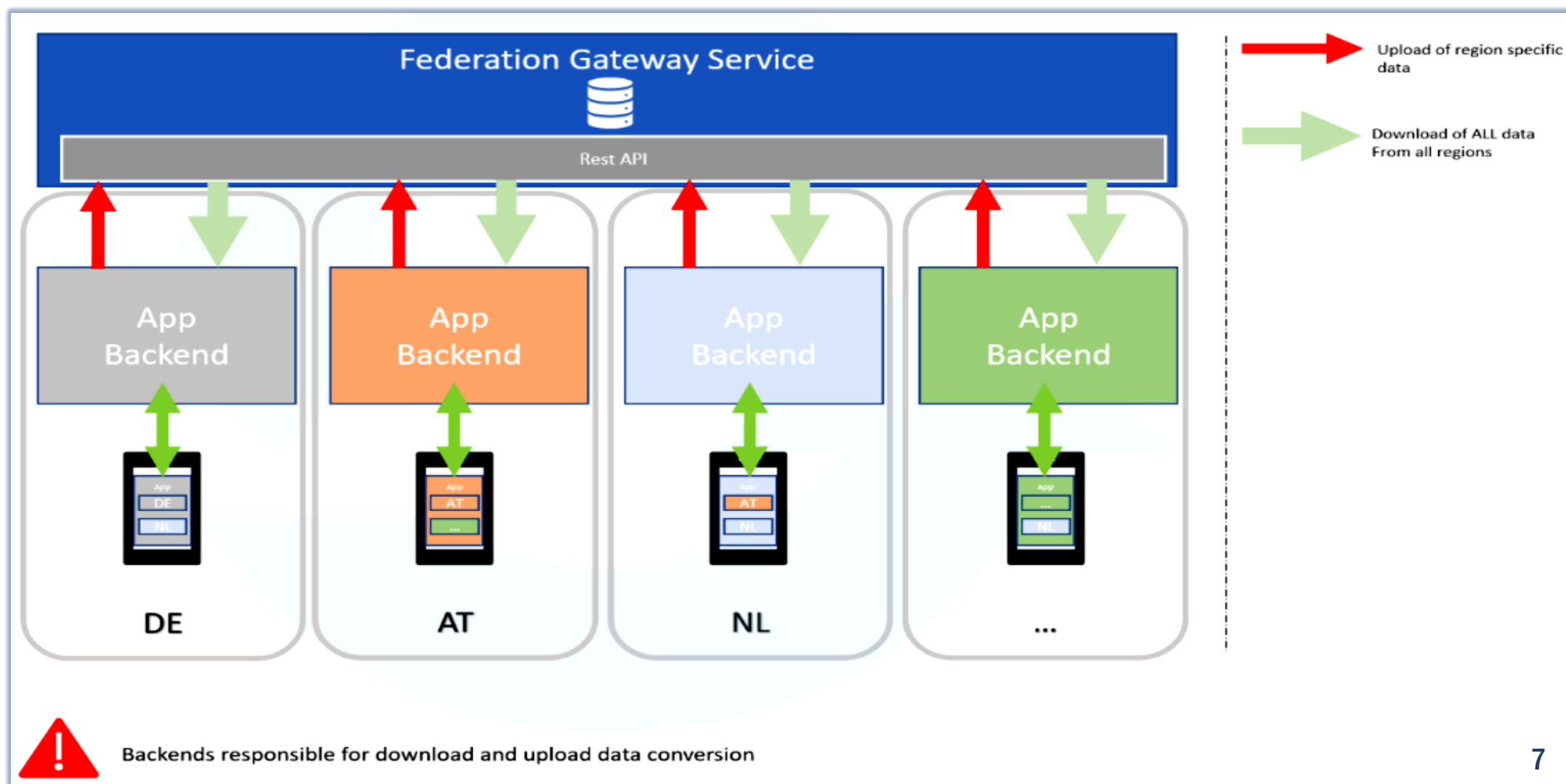


Via the gateway, keys will also be distributed to the backend servers of other relevant countries' app users. The gateway sends the keys to the 'country(ies) of interest'. These are the countries the user had visited in the previous 14 days.

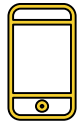
The information will be held on the European gateway for a period of maximum 14 days and **sent to the servers of the other participating national apps along with the list of countries visited.**

As with the national apps, the gateway does not process any information that directly identifies any individual.

# Federation Gateway Service Overview



## Next steps



Between 14-18 September, a **successful pilot** between the backend servers of the official apps from the Czech Republic, Denmark, Germany, Ireland, Italy and Latvia, and the newly established gateway server took place.

Uploads and downloads between the back ends of the participating apps and the gateway server worked as planned.



On 28 September, the **EFGS went live**, technically ready for Member States to join.

In **Wave 1, DE, IE, and IT** are expected to join the EFGS in mid-October.

The rest of the Member States in the piloting community, **Wave 2**, are expected to join by end of October.

There are other Member States who are not part of the piloting community, but also developing an application. They are **expected to join gradually from October onwards**.



# Operational setup

## System owners

DG SANTE and DG CNECT

## Subcontractor for operating the EFGS

T-Systems

## Infrastructure provider (hosting servers and platform technology)

DG DIGIT

The EFGS is running in the Commission's data center in Luxembourg

The image features three European Union flags, each with twelve yellow stars on a blue field, waving on flagpoles in the foreground. The background is a blurred view of a large, modern building with a curved facade and glass windows, suggesting a European Union institution. The text "Q & A" is centered over the flags.

Q & A