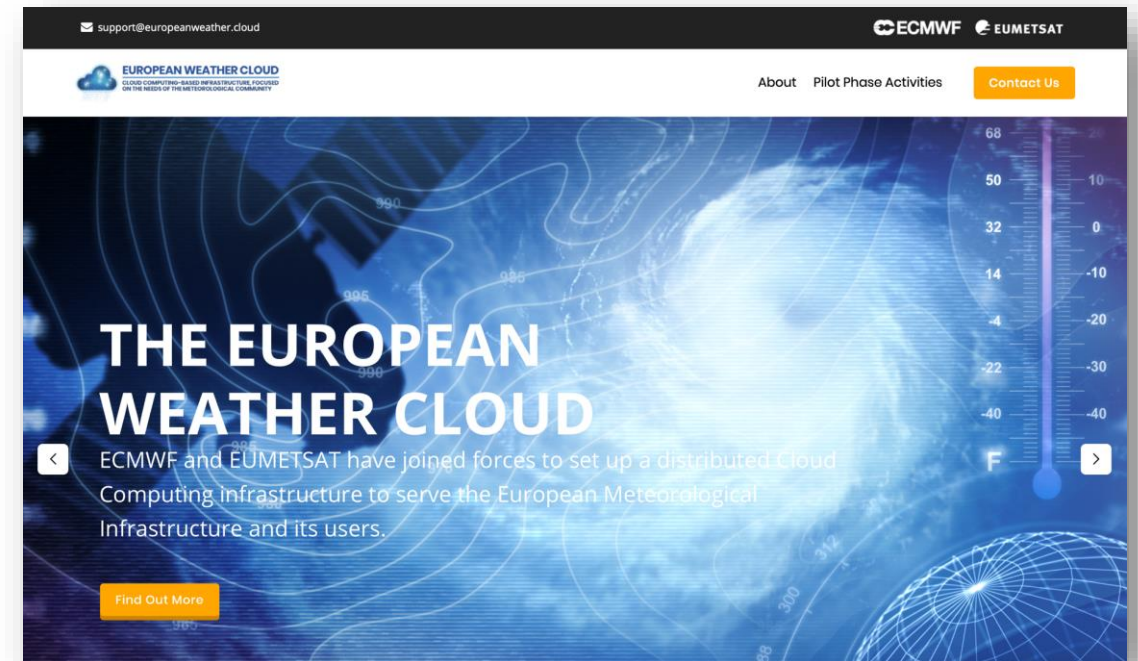


# Migration to the operational infrastructure

## EUMETSAT

Roope Tervo



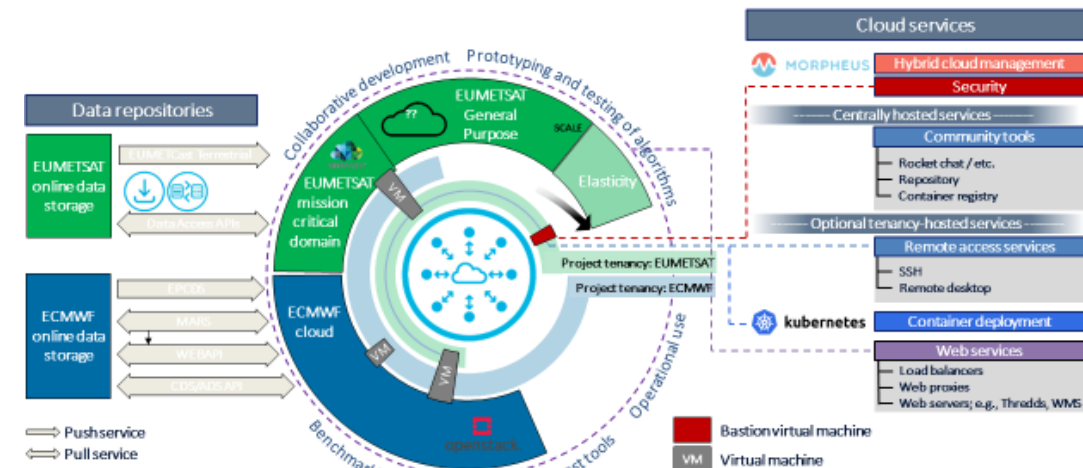
# Why a migration?

- Pilot phase completed successfully with submissions to Autumn delegate bodies → closure of the pilot planned
- Now changing from pilot infrastructure to an operational one, with more room to grow
  - Existing infrastructures were for testing and may not have been optimal or expandable
  - Both ECMWF and EUMETSAT are going to change their infrastructure
  - The infrastructure change occurs at different times for EUMETSAT & ECMWF (following slides)



# EUMETSAT tenancies will be migrated into the new infrastructure

- Following the normal processes, this has meant a tender to ensure the most competitive solution
- New infrastructure will be provided by the winner of this ITT: CloudFerro
  - The contract is elastic allowing size of the infrastructure to evolve based on the annual assessment
- Infrastructure based on OpenStack, Morpheus on top
  - Public IP-addresses will change
  - Data access may change for users exploiting the NAS
- New infrastructure not necessarily at EUMETSAT premises but connected with fast dedicated network link to ensure fast access to data
- Everything *needed* will be migrated
  - But only required parts
  - Currently, 14 tenancies to migrate



# Migration approach



## “Hot migration”

Tenancies who need the resources between December – January will be migrated as “hot migration”

- Some downtime unavoidable
- Migration done together with users, to ensure everything is available and working in shortest possible time
- Only limited number of tenancies possible to migrate like this due to the limited time

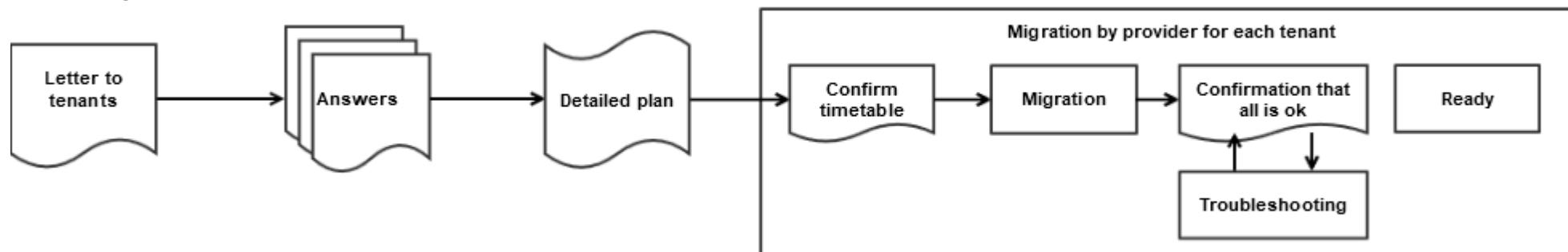


## Cold migration

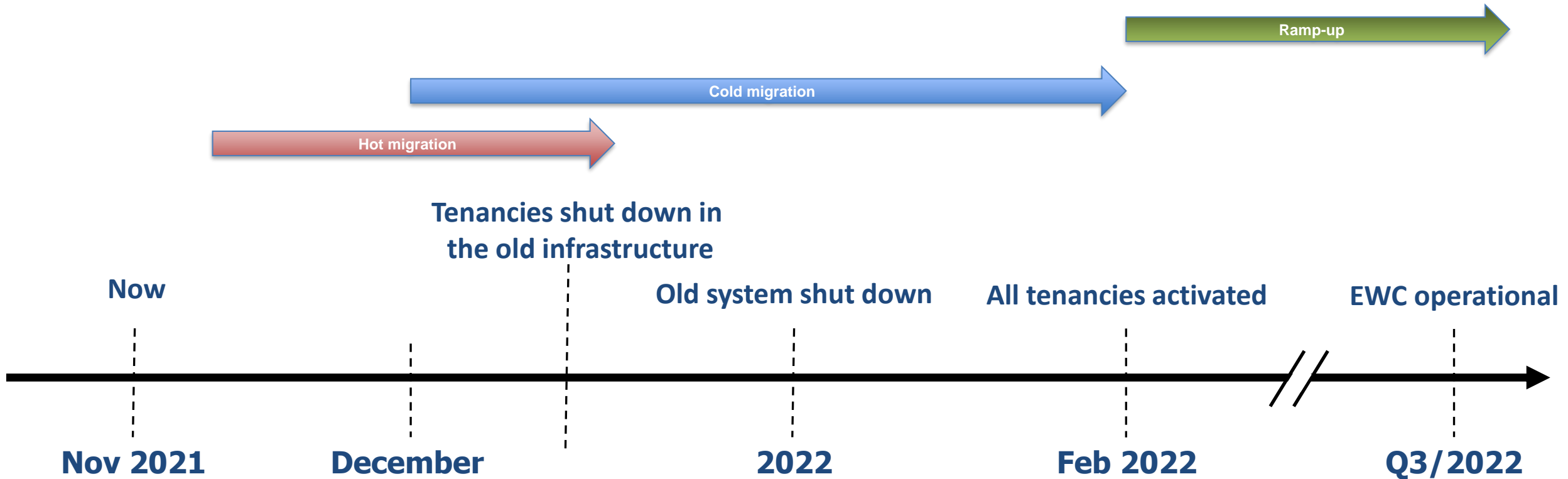
Tenancies who do not need the resources live over the Christmas period are migrated as “cold migration”

- Resources are shut down somewhere in December and migrated into the new infrastructure
- Schedule a meeting per tenancy to activate, demonstrate and check everything is ok
- May take a little while to work through all tenancies

### Initial migration process



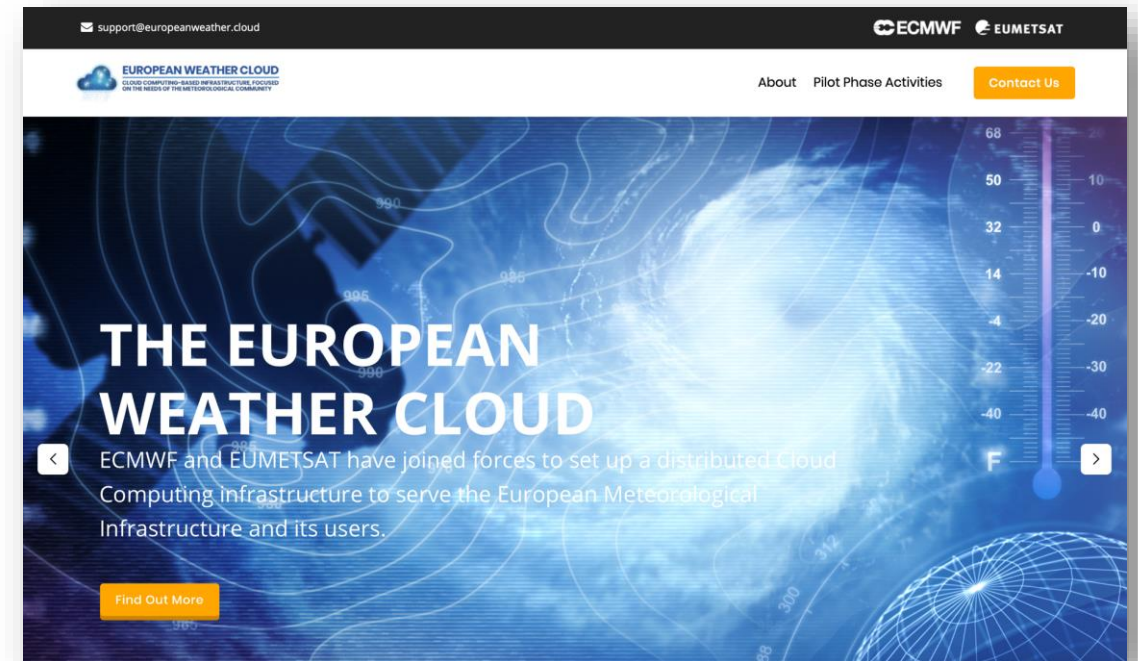
# EUMETSAT migration timeline – zoom in on current period



# Migration to the operational infrastructure

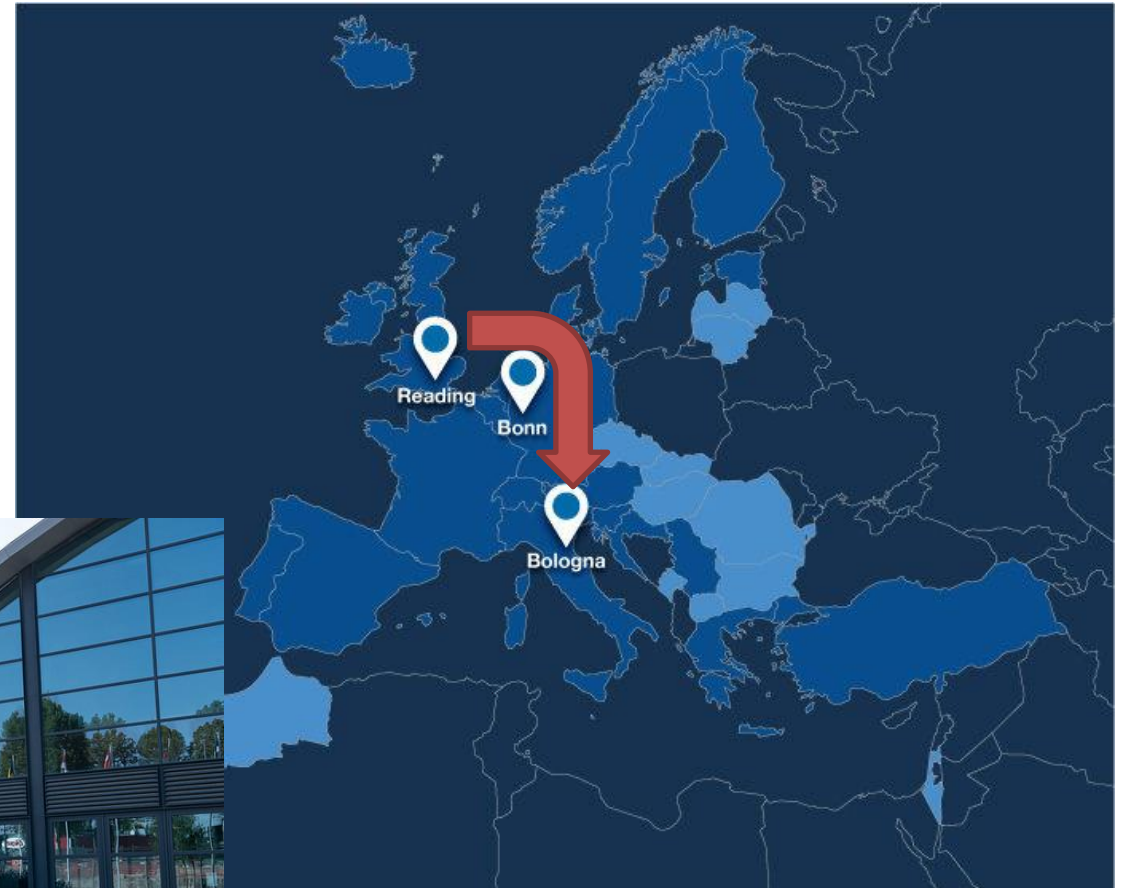
## ECMWF

Xavier Abellan



# Context: 2022 for ECMWF

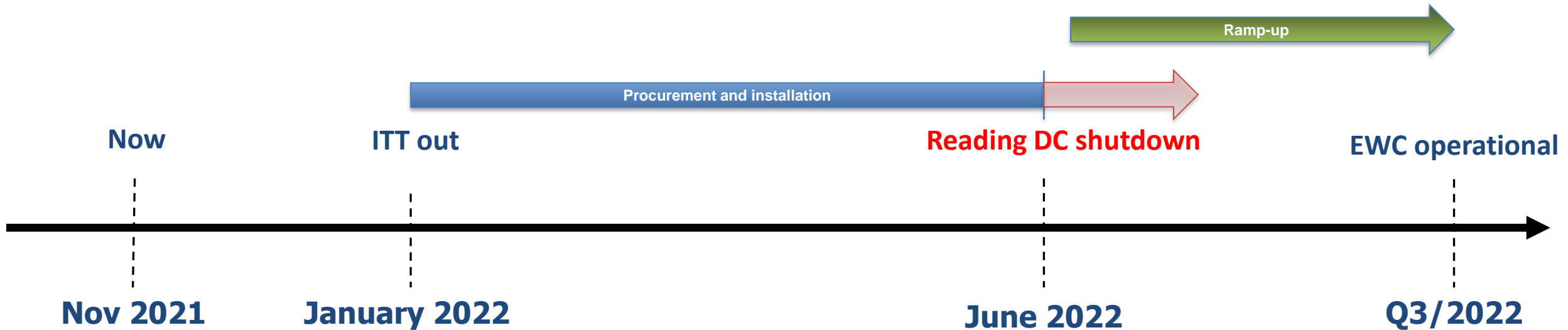
## New datacentre in Bologna



# ECMWF migration to operational infrastructure

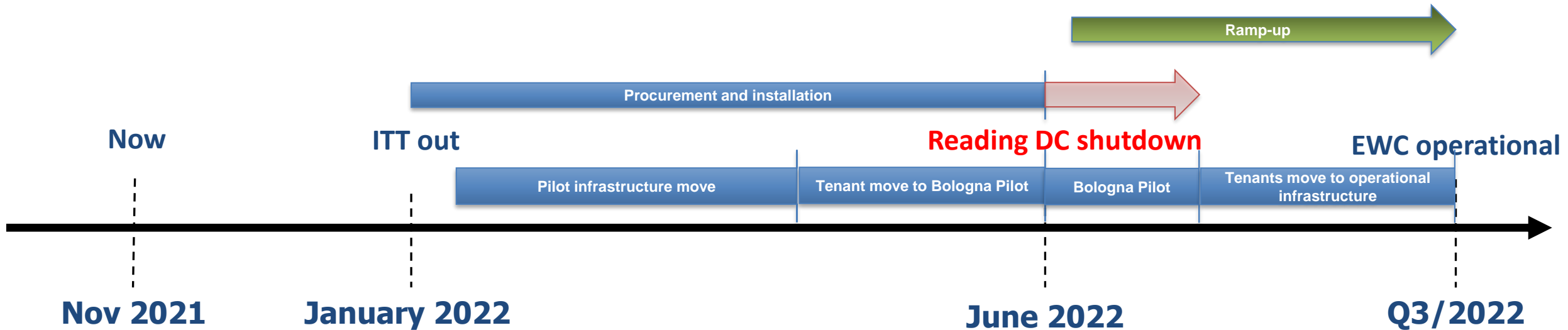
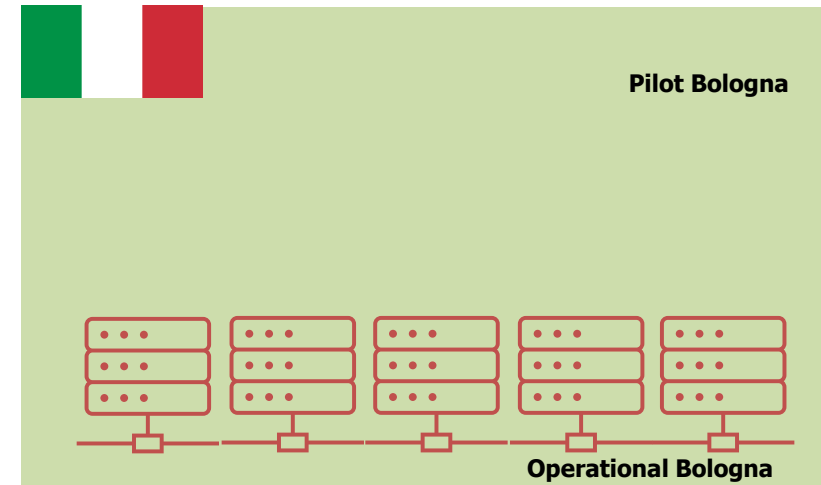
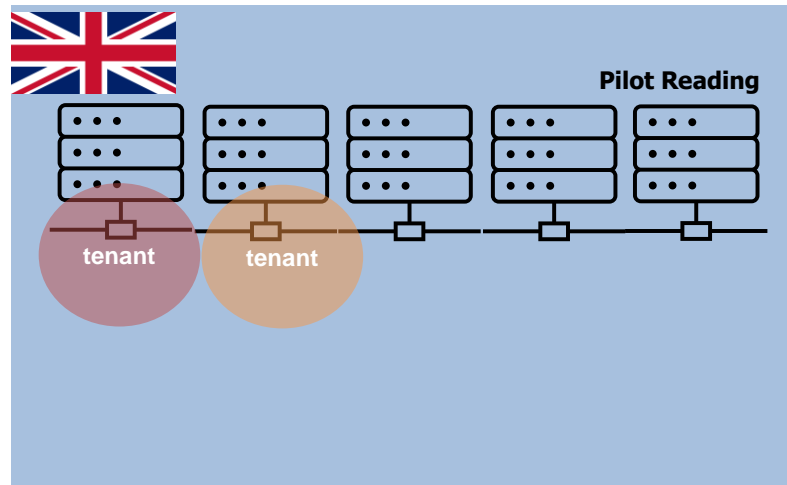
- Time Constraints:

- ITT for cloud infrastructure out in January 2022
- Reading Datacentre shutdown end of June 2022





# ECMWF migration to operational infrastructure: bridge proposal



# Approach

- Building on experience on previous migration – Openstack Rocky to Ussuri
- Individual liaison with existing tenants and Computing Representatives
  - What needs to move
  - What can be recreated on new premises
  - What data needs to be copied over
- Agreement with tenants on suitable date and time for each move

