



H2020-EUK-2016: **EU-Korea Joint Call**

**EUK-03-2016: Federated Cloud
resource brokerage for mobile
cloud services**

Cloud Computing International priorities

- **Targeted Cloud research** that is driven through **coordinated calls** in FP7 and H2020 (current collaboration activities include Japan, Brazil and Korea)
- **Cloud policy** coordination on specific areas: **international standards for SLAs, certification and cross border data flows** (on-going bilateral dialogues and actions with USA and Brazil)
- ✓ ***Results from international Cloud Research will facilitate **policy coordination** in the relevant areas between the EU and the involved third countries.***

The Challenge

- **Cloud federation** enables cloud providers to expand their business globally and easily adjust to unexpected increases in demand through dynamic resource brokering.
- The **dynamism of mobile users and applications** coupled with the advent of different devices and sensors make it difficult for the cloud provider to predict in advance the **need for the cloud resources** required to fulfil the application's requirements.
- **Mobile cloud services** require the support of **very scalable cloud platforms** in order to provide optimal services to mobile users especially for services and **data hosted and executed across borders**.

What we need:

- **Advancements** are needed in the area of **Cloud Resource Brokerage** that will provide effective **utilization** and **optimization** of **heterogeneous resources** (such as storage and communications) for **mobile applications and services in federated cloud environments**.

The Scope

- **The development of an innovative cloud resource brokerage platform** where **advanced Cloud technologies** are supporting the unpredictable mobile application needs to address challenges like:
 - **heterogeneity, ultra- scalable resource provisioning & availability, computing offloading, code portability, data integrity, context-awareness, quality of service, etc.)** stemming from different **application domains in business and societal contexts.**
- The technologies developed should take into account **interoperability**, and **portability** issues and aim towards future standardization.
- The technologies developed should be validated through relevant **mobile applications** requiring a **federated Cloud environment**, in which services and data can be hosted and executed efficiently **across borders.**

Expected Impact

- Credible demonstrations based on **cross-border** business and/or societal applications of robust interoperable technologies for mobile applications on cloud platforms.
- Concrete implementations of **interoperable solutions** for **Cloud resource brokerage** technologies that are candidates for **standardisation**.
- **Joint contributions** to International Standardization and/or Forum activities.

Type of Action: **RIA**

Total budget:

- ✓ **3,0 MEUR (EU Contr., funding rate: 100%). Requested contribution from the EU of EUR 1.5 million.** Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Formalities and schedule

H2020-EUK-2015: Opening date: 20 October 2015

Deadline: 19 January 2016 @17h00 (Brussels time)

Additional admissibility criterion

- Participants in the EU collaborative projects are required to conclude **a coordination agreement** with the participants in the coordinated project funded by MSIP (Ministry of Science, ICT and Future Planning) or IITP (Institute for Information and Communications Technology Promotion). **A final draft of this agreement has to be provided with the proposal.**

Additional eligibility criteria:

- Proposals submitted to this call which **do not include coordination** with a South Korean proposal submitted to MSIP or IITP for evaluation will be considered **ineligible**.
- The proposed project duration shall not exceed **24** months.
- The Korean authorities can consider non-eligible proposals with participation of partners from third countries (countries other than South Korea, EU and Associated states). Consultation to MSIP or IITP representatives is highly advisable before submitting proposals involving third country organisations.
- Proposals will only be selected on the condition that their corresponding coordinated South Korean project will be funded by MSIP or IITP.

Coordinated Call Conditions(*)

Submission and evaluation follow the principles of Horizon 2020 calls with certain specific conditions:

- **Common PartB** (technical annex)
 - **PMs for each partner/per task is required**
- EU and SK proposals submitted to the respective coordinated calls
 - **European consortium signs contract with the EC**
 - **Korean consortium signs contract with the Korean funding agencies MSIP or IITP**
- Each proposal should include **a coordination agreement**
 - **Signed before starting the project**
 - **Does not replace the Consortium Agreement (which is still required from all EU projects)**
- EU-SK research plan: **balanced** effort, genuine cooperation
- Duration: 2 years max.
- Max. funding (EU): **1.5M€** per RIA project

Further information

Digital Agenda – Cloud Computing

<https://ec.europa.eu/digital-agenda/en/telecoms-and-internet/cloud-computing>