

# **EU-IOT**LET'S GET THE JOURNEY STARTED

Dr Monique Calisti

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#### IMPORTANT STRATEGIC FACTORS



- Complex boundary conditions
  - COVID19 crises
  - Transition from Horizon 2020 to Horizon Europe
  - We are not the only ones in the IoT house!
- We must relate from a strategic and roadmapping point of view to:
  - EU Data Strategy EU Industrial Strategy EU Recovery Plan Green Deal
  - Development of GAIA-X / Cloud Federation
  - Upcoming partnerships in particular
    - Smart Networks and Services
    - AI, Big Data and Robotics

#### ROADMAPPING



#### **IMPORTANT ELEMENTS**

- European Commission and most specifically DG CONNECT
  - EU Data Strategy EU Industrial Strategy EU Recovery Plan EU Green Deal
- IoT does not come alone...
  - Emergence and push from EC on EDGE COMPUTING
  - Development of GAIA-X / Cloud Federation
  - Al/Data Analytics, Blockchain/DLT, 5G/6G, CLOUD
- Upcoming partnerships in particular
  - Smart Networks and Services
  - AI, Big Data and Robotics

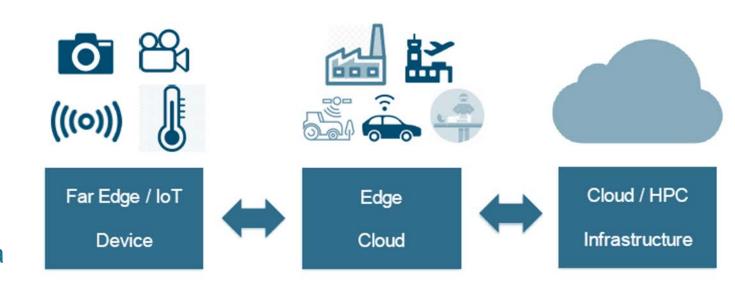


# IMPORTANT TECHNOLOGY TRENDS



#### OF RELEVANCE ALL ACROSS THE EU-IOT ACTIVITIES

- EDGE COMPUTING very high up on this Unit's agenda
- A shift towards the edge
  - Computing Continuum orchestration from Cloud to Edge IoT
  - Data value generation closer to where data is produced
  - Federating far edge resources via
    5G to provide cloud resources



# BROADER ECOSYSTEM



#### **MACRO PERSPECTIVE**

- SNS partnership
  - AIOTI, NESSI ...
- Big Data, Al and Robotics partnership
- Alliance for Industrial Data and Cloud
- INATBA Blockchain Alliance
- Policy domains Green Deal
- Pre/Standardisation initiatives (ETSI, TM Forum, 3GPP...)
- Open source for a (OpenStack, CNCF ...)
- Engagement of SMEs/Start-ups
- Verticals 5GAA, 5GACIA, AECC …
- See WP3 CATALYST

#### MICRO PERSPECTIVE

- Ongoing and upcoming IoT projects.
  In particular:
  - NGIOT
  - OPEN DEI
  - ICT-56 projects
- Other H2020 projects (CSAs in particular) in other related domains – 5G PPP, Cloud, etc.
- See WP2 (Task 2.1), but all WPs concerned

# LOOKING AHEAD



5G IA AENEAS JU KDT **EPOSS** JU SNS ARTEMIS-IA **BDVA** GAIA-X European Alliance for Data and Clouds NESSI

**EFFRA** 

Horizon Europe Cluster 4: Digital, Industry, Space

- Work Programmes
  - Destination 3 World leading data & computing technologies
  - Destination 1: Climate neutral, circular and digitised production

Horizon Europe Cluster 3: Security

Horizon Europe Cluster 5: Energy and Mobility

Alliance for Internet of Things Innovation

AIOTI

Digital Europe

- Artificial Intelligence
  - Data Spaces
  - · Cloud to edge federation
  - Testing & Experimentation
- Cybersecurity

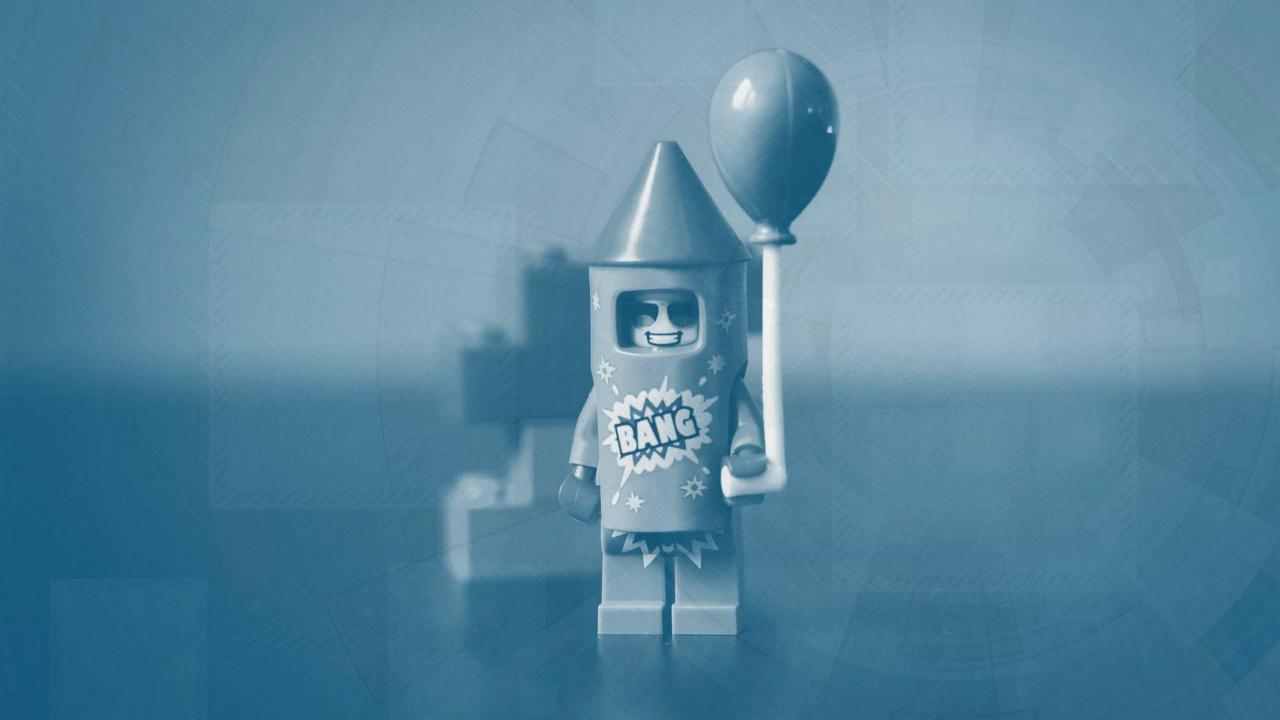
Horizon Europe Cluster 6: Agriculture, ...

From EC slides: IoT and Edge Computing Rolf Riemenschneider, IoT Unit 20 October 2020

#### LET'S NOT RE-INVENT THE WHEEL

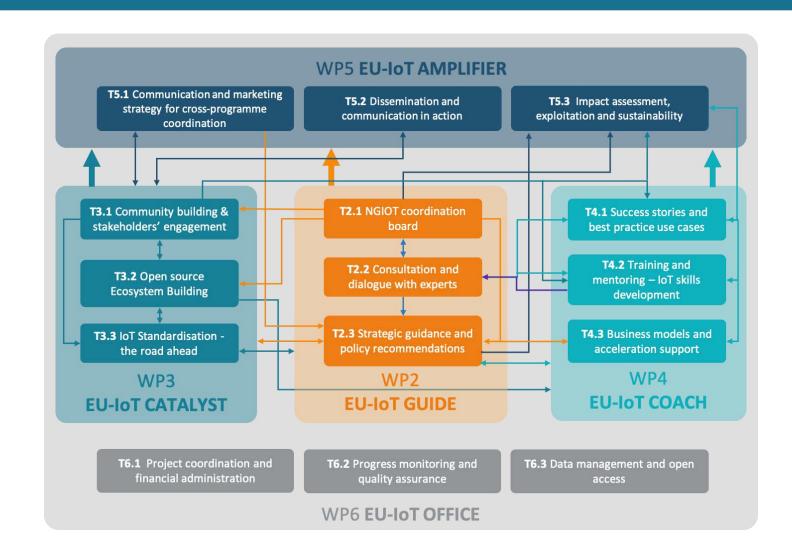


- NGIOT Martel ensure close coordination and complementarity
  - Roadmapping
    - Check https://www.ngiot.eu/resources/deliverables/
  - Communication
- OPEN DEI
  - Reference Architecture for cross-domain Digital Transformation
    - https://www.opendei.eu/open-dei-reference-architecture-for-cross-domain-digitaltransformation/
- ICT-56
  - Direct engagement via Task 2.1, but all WPs must be engaged in monitoring and liaising as relevant



# **ZOOMING INTO EACH WP**





#### **TIMELINE - YEAR 1**



D01 M01 M03 M06 M09 M12

EU-IOT GUIDE

"Strategy across NGIoT ecosystem"

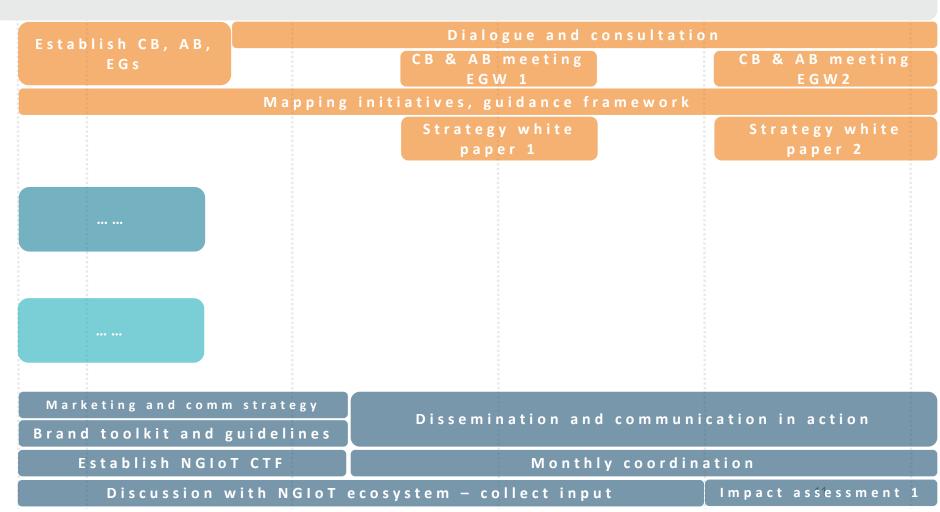
**EU-IOT CTALYST** 

"Community building and innovation strategies"

**EU-IOT COACH** 

"Positioning and strengthening IoT as a driver"

**EU-IOT AMPLIFIER**"Outreach and impact creation"



# WP2 – EU-lot GUIDE

# **OBJECTIVES**



- Support clear joint strategic objectives to strengthen and grow NGIoT ambition.
- Establish connections between NGIoT projects and the EU IoT community.
- Engage stakeholders to embed human-centric IoT work to consolidate NGIoT efforts in the transition to Horizon Europe.
- Harmonise research and innovation efforts across NGIoT, to contribute to a roadmap and policy reccomendations on future IoT investments.

#### **WORKPLAN**



#### **TASKS**

- Task 2.1 NGIoT Coordination Board (M1-M30) (Martel)
- Task 2.2 Consultation and dialogue with experts (M1-M30) (BLU)
- Task 2.3 Strategic guidance and policy recommendations (M1-M30) (BLU)

#### **DELIVERABLES**

- D2.1-2 Towards a vibrant
   European IoT ecosystem strategy white paper Version 1, 2
   (Martel, R, PU, M06, M12)
- D2.3-4 Experts consultation and dialogues report Version 1, 2 (BLU, R, PU, M12, M24)
- D2.5-6 NGIoT roadmap and policy recommendations Version 1, 2 (BLU, R, PU, M18, M30)

# **KEY PRIORITIES – YEAR 1**



- Coordination Board members (discuss based on the ppt)
- Define key strategic areas of actions
- Launch a successful Coordination Board with the right structure
- Curate a strong and relevant expert group
- Ensure high engagement

# **PLANNED ACTIVITIES – Year 1**



- Finalise the structure of the Coordination Board (EC collaboration) and establish the board, the welcome package and the communication / collaboration tools (M2)
- Organise the welome (M3) and bi-monthly CB meetings (M06 CB, AB common meeting)
- Plan the framework of collaboration and engagement for the Advisory Board, Expert Group and Interest Groups (M2)
- Draft criteria for Experts Group and Interest Group members (to extend the invitation and the engagement) (M2)
- Onboard AB, agree on the terms of reference, agree on code of conduct, prepare member pack (M3), organise first 2 meetings; collect minutes to reports (M6,12)
- Evaluate criteria for EG members (M3), prepare first workshop, organise agenda and focus, design output paper, collect results from workshop (M12)
- Define framework for activation and protocol for IG meetings (M3); set up logistics, organise meetings and collect outputs into report (M6)
- Map and coordinate collection of European and global initiatives in IoT, key policies, research programmes and IoT agendas (M3).
- Develop a guidance framework to capture inputs from WPs and NGIoT RIAs (M3)
- Summary of challenges in IoT adoption and implementation in Europe, and research and investment priorities (M6)

# WP3 – EU-lot CATALYST

# **OBJECTIVES**



- To assist the acceleration of the NGIoT initiative by engaging all target stakeholders in growing and strengthening a large-embracing ecosystem, while creating synergies among them.
- To grow the NGIoT ecosystem and assist in partnership creation and stakeholders networking, via actions that facilitate and promote the direct engagement of relevant stakeholders, reaching out to new players and across different research and innovation communities.
- To ensure development and adoption of innovative human-centric IoT concepts and solutions, fostering effective technology transfer and knowhow exchange, while mapping NGIoT efforts into open-source, prestandardisation and standardisation activities.

#### **WORKPLAN**



#### **TASKS**

- Task 3.1 Community building and stakeholders' engagement (M1-M30) (BLU)
- Task 3.2 Open-source ecosystem building (M1-M30) (INTRA)
- Task 3.3 IoT standardisation, the road ahead (M1-M30) (FOR)

#### **DELIVERABLES**

- D3.1-2 Community Engagement Report Version 1, 2 (BLU, R, PU, M18, M30)
- D3.3-4 IoT Open-source Ecosystem
  Catalogue Version 1, 2 (INTRA, R, PU, M18, M30)
- D3.5-6 Mapping of Knowledge Areas to Standardisation Version 1, 2 (FOR, R, PU, M18, M30)
- D3.7-8 Recommendations on research priorities and innovation strategies to standardization Version 1, 2 (FOR, R, PU, M12, M30)

# **KEY PRIORITIES – YEAR 1**



- Establish the Expert group, and process of communication/feedback with concrete milestones
- Trigger the IoT Next Club
- Define the major community events (EU-IoT forum, EU-IoT Hackathon format)
- Establish a plan for the liaisons with other relevant initiatives, process and input capturing/information exchange.
- Trigger the map of relevant IoT open-source initiatives, (first version by M03)
- Defining the methodology and process to map relevant strategic areas and gaps in standardisation
- Provide initial recommendations on research priorities and innovation strategies to standardisation

#### PLANNED ACTIVITIES – YEAR 1



- Contribute to the Liasons list (WP2) Create a "living" list/database of relevant contacts and their roles (M3)
- loT Next Club Flyer /Website Adjustment Engage and position the IoT Next Club membership, prepare AMA sessions (M2)
- Event calendar and classification Define a process calendar for external event attendance together with WP5, classify events by their relevance to EU-IoT to decide attendance/contribution (M3)
- Template for Event participation Capture the participation/organization in strategic external events; types of contributions, etc. (M6)
- Initial mapping of strategic research areas /gaps in standardisation/H2020 projects (White paper input) Initial mapping of relevant strategic areas and gaps in standardisation towards H2020 projects (aligned with WP2 plan)
- IoT community networking framework initial specification Define framework for networking with IoT community (e.g. different categories of engagement, types of communities, stakeholders, etc.) (M5)
- EU-IoT flagship event design and implementation Organise EU-IoT flagship event: design and implementation (M8)
- Hackathon design and planning (M7)

# PLANNED ACTIVITIES – YEAR 1



- IoT related Open-source software initiatives map Creation of a Map of Prominent IoT Related Open Source Initiatives (M8)
- Open-source outcome report Documentation of the Open Source Outcomes, including those of the EU H2020 IoT Projects
  - M6: draft document
  - M12: final document
- White papers on cross-project/Open-source initiatives collaboration Exploring the potential for cross-project collaboration within specific Open Source projects Production of relevant White Papers (M12)
- List of participation in open-source IoT events Streamlining of the work of the task with other events of the IoT Open Source Community (M12)
- List of standardisation bodies and SDOs Identification of the different standardisation bodies and Standards Development Organizations (M6, M12)
- Recommendations on research priorities and innovation strategies Initial recommendations on research priorities and innovation strategies to standardisation (M12)

# WP4 – EU-lot COACH

# **OBJECTIVES**



- To foster the development of business models, innovation activities and skills building lowering the barrier for adoption and development of IoTempowered solutions
- To study internationally recognised IoT Business Development cases in different industry sectors, technology assessment approaches and digital maturity levels, to analyse success stories and best practice use cases, to
- To facilitate development and adoption of human-centric IoT solutions, by defining dedicated training programmes, which elaborates the gathered knowledge, through
- To identify and share successful business model patterns and practices leading to a toolbox of models, methods and recommendations, helping innovators succeed with IoT-empowered solutions

#### **WORKPLAN**



#### **TASKS**

- Task 4.1 Success stories and best practice use cases (M01, M24) (INTRA)
- Task 4.2 Training and mentoring: IoT skills development (M03, M30) (INTRA)
- Task 4.3 Business models and acceleration support (M12, M30) (AU)

#### **DELIVERABLES**

- D4.1-2 Report on best practices for use cases Version 1, 2 (AU, R, PU, M12, M24)
- D4.3-4 Report on Training Activities
  Version 1, 2 (INTRA, R, PU, M12, M24)
- **D4.5 IoT Training Programmes** (INTRA, O, PU, M30)
- D4.6-7 Report on IoT business model innovation patterns and acceleration support activities Version 1,2 (AU, R, PU, M24, M30)

# **KEY PRIORITIES – YEAR 1**



- Define key strategic concepts of an "IoT success story use case"
- Establish a strong backlog of successful IoT use cases
- Initiate data collection and analysis to ensure a thoroughly tested and refined research design

#### PLANNED ACTIVITIES



- Create backlog template for partners to contribute with IoT use cases (M01)
- Create a template for case material (M02)
- Develop consent form for data collection from use cases (M02)
- Develop and document data collection methodology (M02)
- Develop interview guideline for assessing the success story of IoT use cases (M03)
- Develop survey template for assessing business model patterns of the IoT use case company (M03)
- Contact selected use cases from the backlog and plan the initial interviews (M03)
- Conduct the initial interviews (to test and refine research design) (M04)

- Perform analyses of the initial interviews, surveys and DMAT assessments (M05)
- Develop example / proposal on case material (M09)
- Discuss the concept of training activities and programmes T4.2 (M02)
- Desk Research on IoT Training Courses (M03)
- Mobilize "IoT Summer School" Participants (M04)
- Present Initial Certification Possibilities (M05)
- Develop training materials (TBD)
- Plan training workshops (M05)
- Plan webinars (M05)

# WP5 – EU-lot AMPLIFIER

# **OBJECTIVES**



- Shape, steer & execute a sound outreach strategy. Establish & run agile, professional communications.
- Extensive amplification of IoT projects/community activities through tools & actions to raise awareness & stakeholder engagement.
- Assess impact creation across the programme; identify assets for European tech. sovereignty; exploit opportunities & sustain momentum

#### **WORKPLAN**



#### **TASKS**

- Task 5.1 Communication and marketing strategy for cross programme coordination (M01-M30) (Martel)
- Task 5.2 Dissemination and communication in action (M01-M30) (Martel)
- Task 5.3 Impact assessment, exploitation and sustainability (M01-M30) (FOR)

#### **DELIVERABLES**

- D5.1 Marketing and Communication Strategy and Plan (R, PU, M04, Martel)
- D5.2 Brand Toolkit and Guidelines (DEC, R, PU, M04, Martel)
- D5.3-4 Dissemination and Communication
  Report Version 1 2 (R, PU, M18, M30, Martel)
- D5.5. Impact assessment Methodological framework (R, PU, M12, FOR)
- D5.6-7 Guidelines for IoT collaboration sustainability Version 1 - 2 (R, PU, M24, M30, FOR)

# **KEA PRIORITIES – YEAR 1**



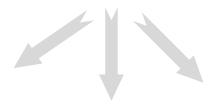
- Define the communication strategy
- Establish the CTF
- Re-brand ngiot.eu
- Re-structure ngiot.eu
- Promote NGIoT Initiative
- Define the methodological framework for project impact assessment

# **BRANDING:** FROM NGIOT PROJECT TO NGIOT INITIATIVE



This remains the project logo In the internal pages





3 proposals for the new logo

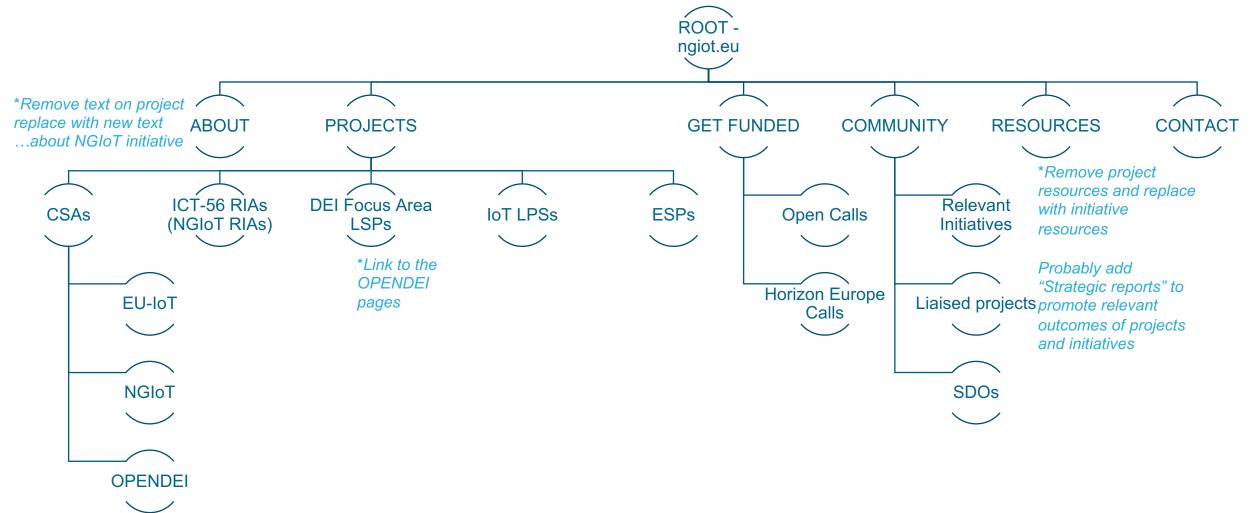






# **BRANDING:** FROM NGIOT PROJECT TO NGIOT INITIATIVE





# PLANNED ACTIVITIES – YEAR 1



- Establish the NGIoT Communication Task Force with the coms focal points of NGIoT projects - to strengthen branding, communication, and dissemination of next generation human-centric IoT
  - Establish a mailing list for NGIoT projects comms focal points
  - Set the date of the 1st Comms Task Force: 15 Nov and maintain a monthly appointment
  - Engage comm focus point from external initiatives in the Comm Task Force calls to exchange news, opportunities etc
- Define the methodological framework for project impact assessment
  - Dedicated tools and channels
  - Define measurement indicators
  - Webinar with Experts to validate the methodology

# PLANNED ACTIVITIES – YEAR 1



#### EUIoT Project level

 Design project brand/communication guidelines, color/font codes, templates for presentations/deliverables/reports, and logos

#### NGIoT Initiative level

- NGIoT visual identity and promo kit definition
- Re-design and steer the current ngiot.eu website into a portal for the initiative
- Establish a protected document repository for the NGIoT community (see NGI Drive)
- Design and production of promotional material
- Storytelling across channels Plan and deliver editorial content in the form of news, blog posts, newsletter, social media animation. E.g.
- Promotion of NGIoT events (Task 2.1) and NGIoT Club



- WP2 EU-IoT GUIDE:
  - CB structure confirm with the EC the members
  - Areas for welcome policy inputs and no-go-areas to discuss with the EC
  - Road-mapping activities confirm time-plan with the EC
- WP3 EU-IoT CATALYST
  - EU-IoT Forum alinged to IoT Week or stand-alone event?



#### WP4 – EU-IoT COACH:

- How do an IoT use case qualify as a success story? Which indicators shall we look at? Is there any suggestion from the EC side that we should follow? Is it up to the Consortium to define?
- Sectors: suggestions from the EC?
- Are there any requirements to the sectoral and geographical spread of use cases?
- Should we use ICT-56 OCs as main source for the use cases?
- Can cases be non-EU?



- WP5 EU-IoT AMPLIFIER
  - Logo of NGIoT Initiative and portal validation with EC
  - Communication Task Force members validation with EC:
    - ICT-56 RIAs
    - OPENDEI CSA
    - NGIoT CSA
    - EC (?)
- WP6 EU-IoT OFFICE
  - Regular online meetings every 3 months?

#### **EU-loT** consortium















# THANK YOU FOR YOUR ATTENTION





