

### **NEM Priority list ranking**

30<sup>th</sup> April 2016

#### **Foreword**

This document provides a first draft list of priorities for the research funding programs WP2018 and beyond in Horizon2020.

In a second step, a wider range of NEM stakeholders will be activated and a more concise document will be provided to the EC by June/ July 2016.

#### Methodology:

To come up with this document, NEM analyzed the NEM SRIA of 2014, compared it with current and future call programs of Horizon2020 and identified new challenges via a qualitative survey amongst NEM members by mid-February 2016. These topics were listed in a survey comprising 109 topics grouped in 23 chapters which was distributed amongst NEM members, following the NEM General Assembly in mid-March. 37 NEM members took part, each had 5 points to distribute amongst the overall 109 topics (for the outcome of this survey please see the excel list attached). The priorities that were voted for most constitute this NEM priority list ranking: The NEM editing group has selected the topic chapters which got more than 4 points, 16 of them are listed below in document.

The editing group proposed also to merge the following chapters together:

- Emotional monitoring, user behavior & Interaction
- Open & Big Data + data analytics

#### List of the most important topics

#### **Transversal aspects:**

Two transversal aspects of future research funding programmes were stressed by the participants of the survey:

- 1. A more dedicated focus on societal challenges, i.e. the cultural, societal and political aspects of the creative sector, and how ICT can support progress in this field (e.g. Big Data analytics vs. privacy, User Generated Content)
- 2. A more dedicated focus on the different creative sectors and their potential synergies: fashion, film, design, publishing, broadcasting and games all have their own, specific innovation strategies, and also areas where these overlap yet project



calls do not yet focus on different creative sectors, but on the creative industries as a whole - which does not reflect reality (yet).

The editing group would also like to point out that several other transversal aspects were not part of the survey yet, should be taken even more into consideration in future programs. This concerns especially:

- a stronger focus on market-uptake in the overall concept of H2020 programs, including: legal aspects, market research & testing, business modeling, sustainability etc.
- a stronger focus on international cooperation
- a stronger focus on accessibility (which can be seen as part of the societal challenges)

The editing group also stressed the interest to apply these technologies to any media&content sectors such as Digital cinema, Book publishing, design, fashion, music, ... through large pilots which could show and validate the relevance of the solutions.

#### **Technological aspects:**

# Chapter 1 (5+18<sup>1</sup>): Emotional monitoring, user behavior + Interaction

- 1.1 Natural Human Machine interaction & Value added contents Augmented and virtual reality experience on advanced devices (glasses, windscreen, TV, mobile, 3D/holographic content and displays)
- 1.2 Adaptive and personalised storytelling collective memory and heritage built on-the-fly combining different content formats
- 1.3 New ways of interaction in complex working environments

### Chapter 2 (12): Creation of Audio/Visual Content

- 2.1 Immersive Content formats for both video and audio
- 2.2 Media-centric IoT applied to the capture of user-generated content the prosumer and social networks and in the professional environment of object-based media
- 2.3 Media orchestration (tools for) managing multiple, heterogeneous devices over multiple, heterogeneous networks, to create interactive and immersive experiences.

#### Chapter 3 (20): Media convergence

- 3.1 Internet of things
- 3.2 Augmented Reality

<sup>&</sup>lt;sup>1</sup> in the original excel sheet: chapters 5 & 18

<sup>&</sup>lt;sup>2</sup> in the original excel sheet: chapter 1



## Chapter 4 (6&13<sup>3</sup>): Open & Big Data + Data analytics

- 4.1 Media and Usage Data analytics in order to propose better service personalisation and recommendation.
- 4.2 New ways of interaction in complex working environments

## Chapter 5 (7⁴): User personalisation, individual experience, service innovation

5.1 - Contextualization to take personalization a step further by adding situation, predictive, and real-time elements to existing tenets of personalization

# Chapter 6 (17<sup>5</sup>): Content delivery

6.1 - Anytime, Anywhere, Any Device (ATAWAD)

# Chapter 7 (10<sup>6</sup>): New formats

7.1 - 3D Virtual/augmented reality using new devices (glasses, 3D Screen, windscreen display, ...)

### Chapter 8 (16<sup>7</sup>): Secure and trustable content

8.1 - Digital Rights Management and content protection, in particular, with the development of user-friendly systems that offer protection without hampering the user experience while at the same time communicating clearly all the relevant information

Automated expression of rights (digital rights information management), machine-readable, in order to facilitate identification, negotiations and transactions concerning protected digital works

8.2 - Digital Rights Management (DRM) interoperability across value chain (or standard solution)

# Chapter 9 (88): Storage, cloud

9.1 - Use of the cloud for the production and distribution of media, both between businesses and to the end user

<sup>&</sup>lt;sup>3</sup> in the excel sheet: chapter 6 & 13

<sup>&</sup>lt;sup>4</sup> in the excel sheet: chapter 7

<sup>&</sup>lt;sup>5</sup> in the excel sheet: chapter 17

<sup>&</sup>lt;sup>6</sup> in the excel sheet: chapter 10

<sup>&</sup>lt;sup>7</sup> in the excel sheet: chapter 16

<sup>&</sup>lt;sup>8</sup> in the excel sheet: chapter 8



In addition, NEM would like to put forward as one of the priorities of future H2020 programs a concept which was originally devised to form a future I<sup>2</sup>C Public Private Partnership (PPP), and which NEM would like to pursue in the form of a I<sup>2</sup>C initiative dedicated to Immersive and Interactive Content. The following list was not part of the voting survey amongst NEM members, yet it will be re-assessed until June/ July 2016, when the final version of this document is due.

### Chapter 10: Focus Program to I<sup>2</sup>C initiative

Activity 1 - Storytelling Creation for I2C

Activity 2 - Mixed content Immersive Technology

Activity 3 - Content Generation Tools for I2C

Activity 4 - Science, technology and arts in Immersive and Interactive Media

Activity 5 - Direct Support to Startups and Microenterprises

Activity 6 - Support to Intermediary Organizations