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**Twenty-fourth  
meeting of the Bureau of the Intergovernmental Council  
for the Information for All Programme  
(IFAP)**

5 March 2015

UNESCO House, Paris (Fontenoy Building, Room VIII)

9.30 a.m. -12.30 p.m. and 2.30 p.m.-5.30 p.m.

**Item 6 of the Provisional agenda**

Reports by the IFAP Bureau Chair and Members of the IFAP Working Groups  
on their respective activities

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## **How Can the Internet and Smart Phones Enhance Social Inclusion and Moderate the Radicalization of Youth?**

*First short draft*

### ***a. How do we understand "the radicalization of youth"?***

In this paper we understand the "radicalization of youth" as processes that lead young people in excluded populations in various developed countries to turn to violence and other illegal activities (e.g. first-third generation immigrants who haven't been culturally or socially absorbed in the general society, unemployed youth, or youth unable to earn a decent salary, or for any other reason lacking hope for a future that can guarantee well-being on the financial, social or psychological levels).

These violent activities can consist of

- Spontaneous expression of rage against authorities and anything that represents the "established society". It is often triggered by police activity – justified or unjustified. Some of these spontaneous expressions can gain momentum and develop into destructive riots.
- Joining fundamentalist groups that are committed to a systematic fight against social order, or against those they deem as ideological or religious heretics.
- Turning to crime or violence on a more individual level.<sup>1</sup>

### ***b. Possible reasons for youth radicalization***

There are many kinds of youth radicalization and they stem from many reasons. Except for reasons that have to do with the social/cultural exclusion of youth (or from their sense of being excluded), it can also stem from a lack of understanding, or wrong policies, by the relevant establishments or other segments of society, and obviously from exposure to extremist and hateful propaganda which now flourishes online. Thus the treatment of this issue should relate to all three sides of it. We believe that limiting effort only to eliminating extremist propaganda or exposure to it is

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<sup>1</sup> See, e.g., Heller, Sara B. (2014). "Summer Jobs Reduce Violence Among Disadvantaged Youth." *Science* 346(6214): 1219-1223 ; Males, Mike A., and Elizabeth A. Brown. (2014). "Teenagers' High Arrest Rates: Features Of Young Age Or Youth Poverty?." *Journal Of Adolescent Research* 29(1): 3-24.

important but amounts to dealing with the symptoms and not with the root causes. We also believe that once they are designed or adapted in an appropriate way, the Internet and digital media can make a tremendous contribution in effectively dealing with the root causes. Here we refer to the root causes and focus mainly on the youth's side, as well as to some extent on ICT-based steps for improving communication between excluded youth and the establishment and other social groups. Similar attention should be given in the future to improving the understanding and approach of the establishment as well as other social groups.

A major reason for the radicalizing process is that the young people in question often live in a social, cultural and psychological vacuum vis-a-vis the general or main stream society, which decreases their well-being and leads to a high levels of frustration and aggression. By "social vacuum" we refer to the fact that often they are unemployed or work in low level jobs, as well as the fact that they lack stable communication or friendships with individuals from other social layers or groups. This of course leads to severe economic problems. Importantly, it also leads to a decrease in their senses of relatedness, competence and autonomy, which according to Self-Determination Theory<sup>2</sup>, a leading theory on well-being on which we rely here lower well-being and increase frustration and animosity. At the same time it enhances the Gehto mentality – the stronger identification with and rigid enclosure in what they conceive to be their home culture or community. This tendency is in any case very natural to human beings- the conditions of frustration-aggression under which these youth live – enhance them<sup>3</sup>.

By "cultural vacuum" we refer to the fact that in many cases they conceive the Western cultures in which they live (obviously only in case of immigrants living in Western societies) as incomprehensible, alien or even hostile. This often leads to feelings of psychological vacuum, or lack of belonging, threatened identity, anxiety and aggression.<sup>4</sup>

### ***c. Why smart phones?***

We will point to several complementary strategies relying on smart phones that can help in the moderation of youth radicalization. All these strategies are also relevant to other kinds of Internet-terminals, but we believe that smart phones are the optimal medium for our goals because of several reasons:

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<sup>2</sup> Ryan R. M. & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being, *American Psychologist* 55(1): 68-78.

<sup>3</sup> According to the Social Self-Categorization Theory (SCT, Tajfel & Turner, 1979), people identify themselves not only as individuals, but also as members of a social group to which they belong (i.e., ingroup). This ingroup is distinguished from the outgroup (i.e., a group that an individual does not belong to) through a separation based on distinct social categories such as religion, race, or culture. As such, people typically seek other people who are similar to themselves, feeling more comfortable with those whom they perceive as members of their own ingroup and may well increase their self-esteem by behaving according to the group norms. People frequently exhibit stereotypes, prejudice and discrimination, which respectively reflect their cognitive, affective, and behavioral reaction towards people from other groups (Fiske, 1998). Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33(47) ; Fiske, S.T. (1998). Stereotyping, prejudice, and discrimination. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., Vol. 2, pp. 357–411). New York: McGrawHill.

<sup>4</sup> See, e.g. Curlette, William L., and Roy M. Kern. (2010). "The Importance Of Meeting The Need To Belong In Lifestyle." *Journal Of Individual Psychology* 66(1): 30-42.

- In many places, most young people, even those from underprivileged backgrounds, have smart phones and they use them in as an essential part of their lives. In fact, smart phones have developed (as in the case of all other young people and many adults) into an extension of their bodies and in the near future their cloths as well (wearable technology) (of course if it turns out that some of the relevant youth lack smart phones, or smart phones of the necessary quality, there will be a need to distribute these gadgets to them).
- Smart phones enable tracking users anytime, anywhere, including in times of stress – specially frustrated needs – and act on it; and vice versa, they allow users in a state of stress, frustration or emergency to appeal for help (if relevant services are available online or in the "physical reality"). Smart phones can be adapted through designated applications to identify users in need of help and connect them automatically (once this possibility was confirmed by the user) to relevant support services, digital or human-staffed.<sup>5</sup>
- Due to new and rapidly emerging language comprehension technology and translation programs, in 2-5 years it will be possible to fluently converse with smart phones through relevant applications as well as communicate with them by writing in an array of languages (including in slang typical to relevant groups of young people in various countries) if the investment necessary to allow for such translation is made. This in turn will solve many language and culture barriers that now prevent effective communication between young people and authorities or other groups<sup>6</sup>.
- New generations of smart phones can have Smart Assistant application (Google Now, Siri, etc.). These are now under rapid developed and their potential is quickly increasing. Smart assistants can follow and, over time and the accumulation of data on the user and smart analysis of the data, "understand" user activities and their operational meaning as well as possible consequences. This is true regarding web activities but also to an increasing extent in the physical reality (through cameras, microphones, sensors and GPS, as well as through ongoing conversations with the user and asking for their feedback etc). It has already been shown in several influential studies that when mindfully using smart assistants in a way which is adapted to the needs of certain groups or professions, smart assistants can facilitate the communication among users from the relevant group, increase their individual and collective ability for self-direction, effectiveness, and overall satisfaction. We believe that smart assistants, once adapted to the needs of specific excluded populations, can improve the above characteristics of their daily lives as well as (through another layer of adaptation) their well-being. They

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<sup>5</sup> See, e.g., UN Office for the Coordination of Humanitarian Affairs, "Disaster Relief 2.0: The Future of Information Sharing in Humanitarian Emergencies" <http://hhi.harvard.edu/sites/default/files/publications/publications%20-%20crisis%20mapping%20-%20disaster%202.0.pdf>. Also, various mobile apps are listed for issues such as earthquakes, tsunami, emergency recovery, and various other issues, in "Emergency 2.0 Wiki". See [http://emergency20wiki.org/wiki/index.php/Smartphone\\_Apps](http://emergency20wiki.org/wiki/index.php/Smartphone_Apps). Also, see, Walker, Cameron. (2014). "In Case Of Emergency, Launch An App", *Discover* 35(2): 18. ; Liu, Bo, and A. Bulent Koc. (2013). "Safedriving: A Mobile Application For Tractor Rollover Detection And Emergency Reporting", *Computers & Electronics In Agriculture* 98: 117-120.

<sup>6</sup> Ribeiro, Norberto, *et al.* (2012)/ "Education And Citizenship: Redemption Or Disempowerment? A Study Of Portuguese-Speaking Migrant (And Non-Migrant) Youth In Portugal", *FORUM: For Promoting 3-19 Comprehensive Education* 4(2): 207-218.

can also serve as a hub mindfully connecting various digital services. This is the conception we want to put forward here.<sup>7</sup>

#### *d. Suggested strategies*

##### *1. From a Smart Assistant to the Smart Companion*

Following the above it is suggested that smart assistants should be developed into Smart Companions (SC). These SCs will be adapted to the special needs of specific excluded populations and will aim to enhance the knowledge of the individual regarding his or her personal profile (interests, motivations, capacities, activity styles, worldview, special needs and edges etc.) and the relevant environment (e.g. regarding the desire to find income sources, or interest-groups in any field, or relevant social services). On the basis of these two knowledge domains, SC will augment (both technology and psychologically) users' ability and motivation to act, and proactively explore their environment (digital and physical). Based on leading motivational, well-being<sup>8</sup> and developmental<sup>9</sup> theories, we believe that such SCs are able to meaningfully enhance personal development and effectiveness, and hence well-being, life satisfaction and adaptation to the general society<sup>10</sup>.

##### *2. SC as a social bridge*

Important part of the SC's contribution to the relevant youth can be in locating digital groups that share their interests in locally or globally. Beyond enhancing the meaningfulness of their lives and well-being, it will form bridges between the excluded youth and groups in other social contexts worldwide. In this way the CS can mentally liberate them from the "ghetto mentality", which is often internalized into their identity in a narrow rigid way and which stems from belonging exclusively to specific religious or ethnic groups that are the default scenario for them. When a member of an excluded group is found to be especially reluctant (often due to fear or rejection, or lack of necessary language or other competence) to approach external groups which can be relevant to him or her, the SC can act as a "resolute and entrepreneurial

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<sup>7</sup> See, e.g., Johnston, Maximilian J., et al. (2015) "Smartphones Let Surgeons Know Whatsapp: An Analysis Of Communication In Emergency Surgical Teams", *American Journal Of Surgery* 209(1): 45-51. ; Walker, Kerry E. (2014). "Smartphone Use In The Emergency Department", *UBC Medical Journal* 5(2): 24-25. ; Ehrenreich B; Righter B; Rocke DA; Dixon L; Himelhoch S. (2011). "Are mobile phones and handheld computers being used to enhance delivery of psychiatric treatment? A systematic review", *The Journal Of Nervous And Mental Disease* 199 (11): 886-891. ; Menzies OH; Thwaites J. (2012). "A survey of personal digital assistant use in a sample of New Zealand doctors", *The New Zealand Medical Journal* 125(1352):48-59. ; Kikunaga S; Tin T; Ishibashi G; Wang DH; Kira S. (2007). "The application of a handheld personal digital assistant with camera and mobile phone card (Wellnavi) to the general population in a dietary survey", *Journal Of Nutritional Science And Vitaminology* 53 (2):109-116.

<sup>8</sup> Ryan R. M. & Deci, E. L. (2000) Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being, *American Psychologist* 55.1 68-78.

<sup>9</sup> Flum, H. & Kaplan, A. (2006) Exploratory Orientation as an Educational Goal, *Educational Psychologist* 41.2 99-110.

<sup>10</sup> Aviram, A., Ronen, Y., Somekh, S., Winer, A. & Sarid, A. (2008) Self-Regulated Personalized Learning (SRPL): Developing iClass's Pedagogical Model, *eLearning Papers* 9 [http://www.elearningpapers.eu/index.php?page=doc&doc\\_id=11941&doclng=6](http://www.elearningpapers.eu/index.php?page=doc&doc_id=11941&doclng=6) ; Aviram, A. & Armony, Y. (2013) "When Computers Will Replace Teachers and Counsellors: Heaven and Hell Scenarios", in: Ciussi, M. & Augier, M. (eds.) Proceedings of the 12th European Conference on e-Learning (ECEL 2013) volume 1, October 30-31 2013, Sophia Antipolis, France, 1-7.

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matchmaker". It can approach the participants of groups it finds relevant for the user even without requesting the user's permission in each specific case (such initiatives should first obtain advance general authorization by the user). As any matchmaker knows, sometimes such initiatives can break the ice in ways that otherwise wouldn't be possible.<sup>11</sup>

### 3. SC as a linguistic bridge

When the SC realizes that the user is avoiding an activity that can enhance his or her development or well-being due to language barriers, it can initiate two parallel activities: triggering the automatic translation function; and referring the youngster to online resources for mastering the language. Learning can be done by relying on the translated conversations of the user with other native speakers of his or her language (as is well known, the relevance of the learning material to the learner can extensively contribute to the success of any learning program<sup>12</sup>).

### 4. SC as a cultural bridge

In many cases immigrants, even of the second and third generations, don't fully understand the contribution of many of the rights characterizing liberal democracy to human flourishing and well-being (this holds only for excluded immigrant groups in Western societies). Often they are also unaware of the fact that these rights have been achieved through long battles, sometimes lasting several centuries, and the extent of evil and human suffering that they can prevent. Hence they don't develop emotional affinity with this essential aspect of Western culture. It is indeed the case that in many countries, legal immigrants have to go through a course of formal learning of the local history, but this usually doesn't touch them emotionally; furthermore, second and third generation immigrants who also might be alien to the local culture don't have to do even this.

To overcome this cultural barrier, games can be developed to simulate important events from local history, aimed at creating identification with the protagonists of the narrative of the hosting country regarding guaranteeing rights that today are considered universal. If these games are developed as engaging (rather than didactic) ones, their impact on the ability and motivation of excluded youths to identify with the new culture are likely to increase.<sup>13</sup>

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<sup>11</sup> Amichai-Hamburger (2013) suggested that today for many people the online groups to which they belong are those with which they identify stronger than they do with their offline affiliations. This is particularly true for people with more off-beat or minority interests. The ease of finding groups of like-minded others on any interest, together with the fact that the group goes with you 24/7, make the online group an extremely influential force.

<sup>12</sup> Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge, England: University Press ; Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience and school*. Washington, DC: National Academy Press

<sup>13</sup> See, e.g., Guillen-Nieto, Victoria, and Marian Aleson-Carbonell. (2012). "Serious Games And Learning Effectiveness: The Case Of "It's A Deal!," *Computers & Education* 58(1): 435-448. ; Winn, Brian. (2007). "The Heart Of Serious Game Design." *Conference Papers -- International Communication Association*: 1. Also, see initiatives such as George Lucas Educational Foundation's EDUTOPIA. <http://www.edutopia.org/mission-vision>.

## **Information 4 Development Working Group**

### **Annual Report Submitted to IFAP's Bureau March 2015**

#### **A. Activities March 2015- February 2015**

Introduction:

The first months were dedicated to planning and setting goals for the working group together with other participants and IFAP members and experts. From these conversations stemmed three lines of action that were implemented during may 2014- February 15 and will be further realized in the next year. All these lines of action are based on the now accepted view according to which "development" has to be assessed in light of enhancement of Well Being of the citizens not just by economic indicators. For us (as to growing number of experts today) economic indicators are important only as far as they contribute to equal enhancement of well being of individuals in society. Three activity lines have been identified:

#### **I. The organization of the International and interdisciplinary conference of Well being through Digital Media**

The conference took place in Israel on 17-19 February 2015 (Agenda attached). The first two days were held in Ben-Gurion University of the Negev, were closed to the public and included presentations of the key issues as well as round table discussions. The third day was open to the public and was held in the Interdisciplinary Center Herzelia. It helped us reach new audiences and broadcast our key messages.

The outcomes:

\*Statement – to be distributed in the next few weeks

\* Three working groups regarding :

- Recommendations for policy makers
- Recomdetations and guidelines for applications and digital content developers
- Recommedqtions for educators and educational researchers of Digital illiteracies.

The mandate of each of these groups is to draft within the next year a text that could serve as a foundation for a proposal to be submitted to a concrete organization or research program. The outcomes of these groups' work will also serve also as a central axis for the next conference.

\* next conference: we are checking possibilities of having the next conference in California, to be hosted by National University, as per the invitation of Prof. Paul Majkut who was one of the participants of the conference.

\* edited digital proceedings

\* possibility of special issue of academic journal (suggested by Prof M. Peters-a participant in the conference) dedicated to the proceeding

\* visibility to IFAP:

(1) press release issued by UNESOC/IFAP ([http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/ifap\\_addresses\\_well\\_being\\_in\\_digital\\_media/#.VPMOwPmUdx5](http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/ifap_addresses_well_being_in_digital_media/#.VPMOwPmUdx5) ),

(2) YouTube channel (<https://www.youtube.com/channel/UCyc8xY74sRyaRI7PDHjzfnA> ),

(3) the forum's web site (<http://hwbdigitalmedia.wix.com/hwb-digitalmedia-#!international-conference-2015/c1pdq>) and

(4) pictures uploaded to Facebook

(<https://www.facebook.com/media/set/?set=a.10155285836260077.1073742002.333174170076&type=3&uploaded=13>).

## **II. Creation of a smart archive on Well being in digital media**

Initial work was done with Dr. Rab Arpad from Obuda university in charge of IFAP's reservoir and Prof. Laszlo Karvalics from University of Szeged and Hungary's representative to IFAP in order to develop a smart sophisticated archive on Well Being Through digital Media and continuously develop it

It includes two stages: immediate/short term and longer term.

\* In the short term (during the next year), the formation of a primary list of keywords related to Well being in digital media in light of:

- Self determination theory
- The theory of Emotional Intelligence
- The concepts of Self Knowledge, Self direction and Self fulfillment –basic to the two previous theories

These keywords will be the foundation of an iterative process that will take place between the Hungarian and Israeli teams (and any other member of the work group or IFAP interested in contributing). This work will aim for formation of ever-enlarging list of terms/keywords which will enable the Hungarian team to form a high quality category in the reservoir relating to Well being through digital media. It will also lead to the development of a foundation for the realizing the long term vision described immediately below

\*The longer term (a year or two) - The submission of a proposal concerning the smart archive on Well Being Through Digital Media to Horizon 2020 EU research framework.



### **III. Catering to the needs of developing countries and excluded populations :**

\* In the conference on Multi-linguism and Multi-culturalism held in Yakutzk in July 2014 there was exchange of ideas how to promote "information 4 Development" and possible new directions. Same activity was performed in the conference for Well Being in Digital Media held in Beer Sheba and Herzelia on February 2015. It became apparent that the developing countries cannot be treated as one group as the differences in the challenges they are facing are deep; for example, South America faces different challenges than Africa, and within these continents there are significant differences. While this may seem obvious, it still requires some thinking to ensure that Information 4 Development be relevant to as many countries as possible and find the commonalities to enable cooperation. This concern cuts through the two previous lines of activity.

\* As first step in this direction we developed the approach we call: "The smart Phone as platform for empowerment" (attached). It takes advantage of the following facts: (1) smart phones are owned by also by members of excluded populations in developed countries and citizens of developing countries; (2) they are used (also ) by them as extensions of their bodies 24/7; (3) it is relatively easy to develop or adapt applications to Smart phones; and (4) they are used as Internet terminals in countries or social contexts in which access to PCs laptops and Internet are scarce.

This approach has been already expressed in a paper that was submitted to the conference on the "Internet and radicalization of youth" organized by UNESCO.

### **B . for March 2015- March 2016**

To be based on, and continue, the activities performed so far as detailed above:

1. Conference
  - a. At least three working groups
  - b. Plan the next conference (2016)(based on the products of the working groups)
  - c. Submit proposal based on working groups works
  - d. Publish the proceedings
  - e. Publish articles based on papers presented in the conference, possibly as a Special Issue
  - f. Promote IFAP's visibility through digital publication of the conference materials
2. Smart Archive
  - a. Expand the Reservoir with additional keywords
  - b. Submit a research proposal to Horizon 2020
3. Catering to the needs of developing countries and excluded populations
  - a. Present papers developing further the concept of "The smart Phone as platform for empowerment"
  - b. Look for opportunities to submit with other members of IFAP a proposal on this issue

Prof Aharon Aviram  
Dr. Galit Wellner  
4 March 2015

## Magnetic Tape Alert

Magnetic tape has been the most widely used audiovisual recording medium for more than half a century. Up to the start of the 21<sup>st</sup> century, it was dominant in the production of radio and television broadcasts and in the record industry. Apart from its role in social and political documentation and the creative industry, it was also the medium used worldwide for cultural documentation and scholarly research.

Audio and video tapes enabled the recording of the musical cultures of the world; of languages and dialects; dances and rituals; social and cultural events. Many of these have changed in style over the years; some have even become extinct. Today's knowledge of the linguistic and cultural diversity of human kind, one of UNESCO's main areas of protection and promotion, is predominantly based on documents recorded on magnetic tape.

With the rapid technical development over the past 25 years, the production and preservation of audio and video documents have become part of the computer world. Around the beginning of the 21<sup>st</sup> century, magnetic tape recording faded away to be replaced by recording on hard disks and solid state media. Today, all dedicated audio and video tape formats are obsolete. Consequently, manufacturers have already stopped, or are about to cease, the manufacture of new equipment, of spare parts and even professional servicing of equipment.

The preservation of audiovisual recordings made using pre-IT technology can only be achieved by extracting the contents from their original carriers; by storing them as files in digital repositories; and by preserving these files by periodic migration from one professional storage system to the next.

Well funded radio, television and national audiovisual archives have begun or have completed the transfer of their holdings to digital files. Less wealthy institutions, however, have not yet been able to fund all the work of transferring their older recordings to digital files. Most of the many scattered, small and badly underfunded cultural and research institutions that hold a significant part of the legacy of linguistic and cultural diversity cannot even begin to make plans to save their material because of a lack of resources and knowledge.

In the past, audiovisual archivists were mainly concerned about the longevity of the original recordings, which was indeed a problem, particularly in hot and humid climatic conditions. Now, however, the threat of ever increasing unavailability of replay equipment and spare parts far exceeds all previous concerns. It was recently predicted that the time window of availability of replay equipment was only 10 to 15 years. Many archive professionals warn that that the time window may, in fact, be much shorter.

The situation was been debated at the UNESCO conference *The Memory of the World in the Digital Age* held in Vancouver in September 2012. Following the *Vancouver Declaration*, the Working Group on Information Preservation of the Information for All Programme (IFAP) of UNESCO in cooperation with the CCAA, (the Coordinating Committee of the Audiovisual Archives Associations), takes the initiative to:

- alert stakeholders of the imminent, and obviously rapidly increasing threat of losing audio and video recordings still sitting on their original magnetic tapes, through obsolescence of replay equipment
- assess the order of magnitude of audiovisual heritage under threat of getting lost by failing to manage its transfer in time

by circulating the attached survey through the UNESCO Field Offices, professional organisations and NGOs, and UNESCO National Commissions.

Apart from this survey, IFAP has installed a website ([address of website](#)) that provides more detailed information on the safeguarding of magnetic tape recordings and on the long-term preservation of audiovisual documents in general. Links are established to standards and recommendations from professional NGOs.

The information received will assist UNESCO to get a realistic view of the quantitative dimension of the problem, and to establish effective counteraction within the framework of its regular programme.

Dietrich Schüller,  
Chair IFAP Working Group  
on Information Preservation

Jonas Palm  
Chair Subcommittee on Technology  
Memory of the World Programme

Draft 2

## Survey of audiovisual collections on magnetic tape, endangered by the rapidly increasing unavailability of replay equipment

### 1. Owner of the collection

Name of the collection

Address

Institution the collection is part of

Name of the person completing the questionnaire

Telephone number

Fax number

E-Mail Address

### 2. Content of the collection. Please indicate main focuses in terms of subjects and regions:

a. Unique documents (primary sources) in the narrower sense of the questionnaire:  
Oral/visual history, language/dialect, folk/traditional music, dances, rituals, cultural events

b. Commercially produced audio and video recordings

### 3. Number of audiovisual carriers in your collection Magnetic tape:

#### Audio

open reel

compact cassettes

R-Dat

Other digital

#### Video

VHS, Betamax

Video 8/Hi 8

U-matic

Other analogue

DV

Other digital

Other carriers: Please give a summary of mechanical (shellacs (78s), LPs) and optical carriers (CDs, DVDs, BDs/Blu-ray), and film

**4) Is there a preservation plan in place for the transfer of contents from original carriers to a digital repository?**

yes                       yes, but not sufficiently financed                       not yet

**5) Availability and maintenance of modern replay equipment, professional staff**

equipment                                      yes                                       no

professional maintenance                      yes                                       no

trained staff                                      yes                                       no

**6) Would you welcome training in audiovisual preservation?**

For managers                                       for archivists

**7) In case of positive answers to 5: Would you be ready to assist other institutions?**

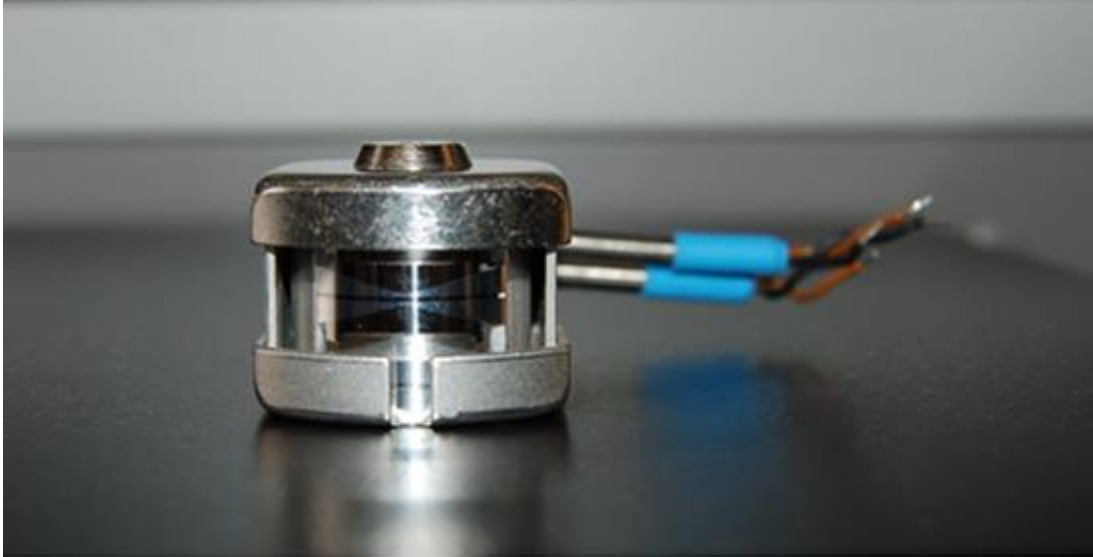
**8) Other matters of concern**

**Date**

**Signature** *(for off-line versions)*

(Eye catcher on CI website)

## Magnetic tape replay equipment fading out



**Replay head of a standard magnetic audio tape player**

The linguistic and cultural diversity of humanity in the present day has been captured on audio and video recordings. Most of these recordings are still in their original state, kept in small collections scattered around the world. Digitization is the only way to preserve the sounds and images and make them accessible to future generations.

Action is urgently needed! Magnetic audio and video tape formats are now obsolete, and equipment for playing them is disappearing rapidly. Recently, one of the two last producers of replay heads used in standard audio tape players has gone out business. Moreover: Sony has announced that it is to stop the production of video tape machines in 2016.

. Urgent Action is needed NOW!

Read more on the initiative of IFAP Information Preservation Working Group to prevent the pending Magnetic Tape Apocalypse [\(link\)](#)

## **THE ENDEAVORS OF ICT ACCESSIBILITY TOWARD INFORMATION RESILIENCE IN INDONESIA**

**Basuki Yusuf Iskandar<sup>1</sup>**

ICT R&D and Human Resources Development Agency

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Indonesia's competitiveness have increased in recent years, namely from the 57th in 2006/2007 to 34th position among 118 countries in 2014/2015<sup>1</sup>. Some indicators such as the number of internet users, the speed of Internet access, and broadband access show the position of Indonesia is still lagging behind in the global level shown of the 144 countries reviewed in 2014/2015, Indonesia was ranked in 112th for the number of internet users, 100th for the speed of internet access, 101st for the fixed broadband access, and 65th for the mobile broadband access.<sup>2</sup>

In Indonesia, the rate of growth of the transport and communications sector in 2013 is still the highest among other sub-sectors, which reached 11.1%. Compared to, for example, the trade, hotels and restaurants which are only contribute 8.3% and construction of 7.3%.<sup>3</sup> The growth rate of the communications subsector was driven by data and internet sales factor, in addition to the increasing number of purchase of new communication tools such as mobile smartphones, tablet PCs, and other telecommunications equipment. How strategic ICTrole in national level?

A study of the National Development Planning Agency of GOI indicates that: 1) Every 10% increase in broadband penetration would increase economic growth by 0.8% -0.9%; and 2) Each 1% increase in broadband penetration of households, the growth of unemployment will be reduced by 8.6%; 3) The development of mobile broadband in the 700 MHz band are expected to increase productivity by 0.4% in the service industry and 0.2% in manufacturing with a total addition of the work-field creation for as many as 327,000 jobs. Other studies shows that 1) the role and contribution of the ICT sector to Indonesia's economy has increased, as seen from the output, gross value added, individual and labor income. To national GDP, the ICT sector contribution has increased from 2.9 % in 2008 to 4.5 % in 2010 (MCIT, 2014); 2) The

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<sup>1</sup>Global Competitiveness Report (GCR) of 2014-2015as cited from World Economic Forum

<sup>2</sup>The report of Ministry of National Planning and National Development Planning Agency of GOI

<sup>3</sup>The 2014 Financial Report of Ministry of Finance of GOI

quality of education and availability of Internet access in Indonesia has a correlation coefficient of 0.71 (source: Ministry of Education of GOI, 2012); 3) In Indonesia, by 10 % average penetration of 3G services (2008-2011), the addition of 10 service connections of 3G per 100 connection, can increase GDP to 1.5% per capita Source (Deloitte GSMA, 2011); 4) The increase 1 % penetration of broadband households reduce unemployment growth of 8.6 % (source : Katz et al , 2012); 5) The development of mobile broadband access in the 700 MHz band is expected will increase productivity by 0.4 % in the service industry and 0.2 % in manufacturing activities (source : GSMA , Boston Consulting, 2010).

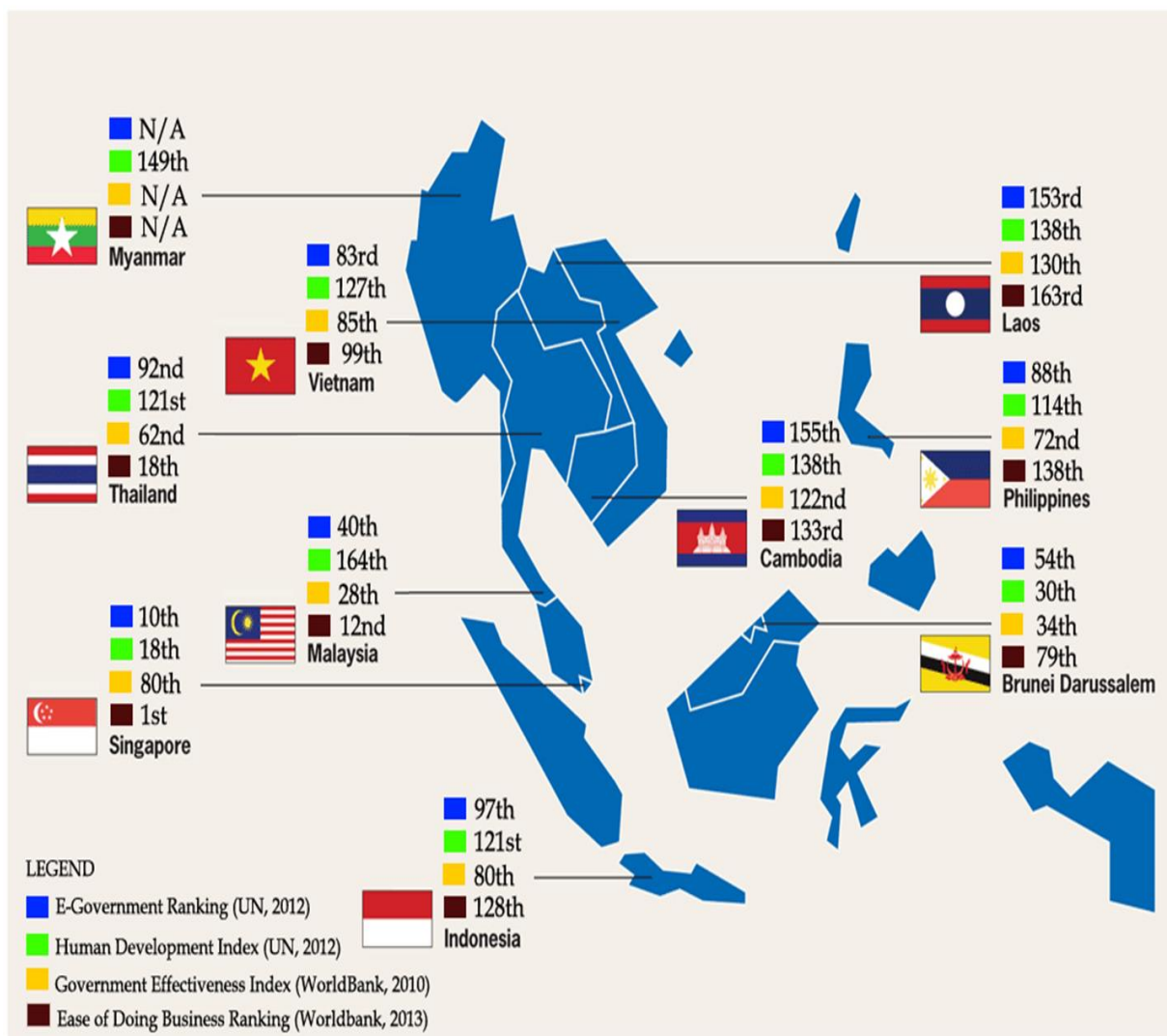
ICTs should be viewed as a strategic national resource which has implications on the sustainability of the state and nation. The consequence of this, ICT must be managed as a resource or treasury capital toward national competitiveness. As a resource, ICT is unique because it holds the potential benefits and at the same time it relates the potential risks that need to be mitigated while securing information security known comprehensively as the concept of the information resilience. In the context of global competition, ICT has determinedly become a strategic necessity and not merely a strategic choice anymore. ICT should be addressed strategically due to its enormous and long-term impact covering almost all development sectors correspondingly. Being thrown into end user market for decades, Indonesia got a very late and weak starting position in ICT development arena, the similar delay illustrated to our responses toward globalization. So it is unquestionably imperative to set ICT as the blood vessels of this Nation, the content as the blood flow entirely of the Nation, the infrastructure and political will as the heart of the Nation. Otherwise, ICT development and competition will lead us to disadvantage position. Citing Trisakti spirits from our founding father, Bapak Soekarno, as I re-interpret it to Trisakti with regard to ICT development. ICT is developed to the manifestation of informative society with competitiveness, character, and dignity. ICT shall be able to create national sovereignty by creating productive and competitive economy, a dynamic and national resilience, and the patriotic, innovative, and superior character nation by shielding our virtuous cultural roots.

Taking into account the amplitude of ICT in industry and its impact on productivity and economic growth, then it is time to leverage governmental role of deploying implementable policy instrument to facilitate industrial growth for example by providing related-equipment for SMEs, uttering smooth strategic alternatives for business integration, and stimulating affirmative policy for local industry expansion

In the hyper connected world of the 21st century, we will lack credibility if it does not reflect the fact that ICTs are all around us, and will continue to shape the sustainable future. Indeed, a more sustainable future is already being created through the proliferation of ICTs. As



technology evolves, and as boundaries shift on the map of knowledge, we are being pressured at every level to adapt in response, the emerging technology, the emerging capabilities, the emerging business models and government has a critical role to the adoption and internalization of the dynamic changes.



Supported by broadband, it is expected in 2025, Indonesia's GDP reached: US\$ 4.0 to 4.5 billion. GOI have working indefatigably to ensure that no blank spot all over Indonesia. However, as issued by National Development Planning Agency of GOI, there are still some critical problems in regard of ICT development: 1) the unequal diffusion of information access (Yates, et al., 2010; Joseph & Nath, 2012). Due to a number of factors in Indonesia, including some of its

islands which geographically remote and uneven distribution of population, affordable access and connectivity is the primary problem complicating basic effort to access information; 2) the shortage of ICT infrastructure allowing broadband access and the slowness of the establishment of the network infrastructure, the training of people to use it and to exploit commercially the information and knowledge that it makes available. Until mid-2014, only 361 districts/cities, or about 72% of the total 497 Indonesia's districts/ cities has been reached by the national broadband fiber optic network. Most of the areas are in western Indonesia;3) the unfavorably high price for broadband connection discouraging national broadband ecosystem. Based on data from the Indonesia's Central Bureau of Statistics, the national income per capita in 2012 was around IDR2,570,000 per month. As for the connection price of 1 Mbps is IDR700,000, or equivalent to 27% of income per month. This figure is much higher than the amount of the average expenditure for the household's basic needs such as for education and health. The high price impedes the potential market arisen from broadband ecosystem; 4) The on-going coordination problems intra and extra-governmental bodies, not to mention the lack of an integrative policy framework from central and local government; 5) the issue of interoperability has become more important as countries deploy e-government systems. In order to provide high-quality services to citizens it is important that services can be accessed from the widest possible range of technology from all over Indonesia.