

**EBU**



# Fundamental Precepts

---

Joint Task Force on Networked Media

*Phase 2*

*June 12, 2014*

# Table of Contents

---

- Fundamental Precepts..... 2
  - 1. Expose business value ..... 2
    - 1.1. User requirements driven ..... 2
  - 2. Format Agnostic ..... 3
  - 3. Vendor-Neutral ..... 3
  - 4. Time is of the essence ..... 3
  - 5. No new invention ..... 4
  - 6. Leverage Internet Technology..... 4
  - 7. Avoid strong binding to legacy technology ..... 5
  - 8. Carefully optimize scope ..... 5
  - 9. Fast Fail..... 5
- Appendix A – Mind Map from meeting, April 30, 2014..... 6

# Fundamental Precepts

---

As work on the Joint Task Force on Networked Media (JT-NM)<sup>1</sup> has proceeded, certain fundamental precepts<sup>2</sup> have become self-evident. The process of formally recording and disseminating these precepts will help the JT-NM focus on important areas and provide a set of values that guide the work going forward.

The precepts presented here are organized according to guidelines established by the Open Group<sup>3</sup>. The Open Group's method for documenting precepts follows a particular pattern. A precept (referred to as a principle by the Open Group) can be parameterized by its **name**, a **statement of the rule it embodies**, the **rationale** for its existence in terms of the business, and the **implications** of the choice. We follow this pattern for the precepts captured below.

## 1. Expose business value

*Statement:* The work of the JT-NM shall be business-driven. Everything it does must, in the end, expose a unit of business value, or that particular item of work shall not be undertaken. No “science projects” – no “stamp collecting”<sup>4</sup>.

*Rationale:* This is not ‘business as usual’. The JT-NM represents a significant effort in the industry, and we cannot afford to fail. Ensuring that what we produce exposes business value keeps us focused on doing things that advance the industry and increases our likelihood of producing timely output.

*Implications:* While it is our goal not to encumber the Task Force with a lot of process or rules, we should look at everything we do through the lens of delivering business value. Activities that do not meet this precept should be redirected or terminated.

### 1.1. User requirements driven

*Statement:* The JT-NM effort shall be user-requirements driven. During Phase 1, the Task Force produced the Gap Analysis Report<sup>5</sup>. This effort yielded over 160 user stories that were condensed to sixteen ‘super user stories’. The activities of the Task Force shall be guided by these user stories.

*Rationale:* It is important that, in order to deliver business value, the activities of the JT-NM be focused on meeting user requirements.

---

<sup>1</sup> <http://www.videoservicesforum.org/jt-nm> or <http://tech.ebu.ch/jt-nm>

<sup>2</sup> <http://www.merriam-webster.com/dictionary/precept>

Precept: a command or principle intended especially as a general rule of action

Origin: Latin *praecipere* to take beforehand, instruct

<sup>3</sup> <http://pubs.opengroup.org/architecture/togaf8-doc/arch/chap29.html>

<sup>4</sup> By ‘no science projects’, we mean no research for research’s sake. By ‘no stamp collecting’ we mean that the JT-NM shall not provide opportunities for proponents to contribute technologies that might benefit them but which do not relate directly to the JT-NM work, or that do not expose business value.

<sup>5</sup> [http://www.videoservicesforum.org/download/jtnm/GapAnalysisReport\\_231213.pdf](http://www.videoservicesforum.org/download/jtnm/GapAnalysisReport_231213.pdf)

*Implications:* We shall work diligently to meet the user requirements identified in Phase 1 of the JT-NM activity.

### **Requirements identified in New York meeting**

At a meeting held in New York on April 30, 2014, a number of user requirements were called out during our session on fundamental precepts. While the Gap Analysis report contains the definitive list, a Mind Map which captures information from the New York meeting is included in Appendix A of this document.

## **2. Format Agnostic**

*Statement:* JT-NM technologies shall be format agnostic.

*Rationale:* End users demand that future facilities must be able to function with many different media formats. They desire the same sort of flexibility in their professional media networks that they experience when using every-day desktop media applications, e.g. being able to quickly and easily play different media formats, or being able to quickly adapt applications to play formats that might not be initially supported by the application. There are many formats in use today. Media companies want freedom of choice to use the best tool for the job.

*Implications:* Nothing in any JT-NM recommendations shall require the use of a particular media format or formats.

## **3. Vendor-Neutral**

*Statement:* JT-NM technologies shall be vendor-neutral

*Rationale:* The JT-NM work is for the benefit of the entire industry. For that reason, it should be possible for any vendor to make use of the recommendations of the Task Force. It is a goal of the Task Force to improve interoperability.

*Implications:* Nothing in any JT-NM recommendation shall preclude multiple vendors from producing interoperable implementations of professional media networks and products.

## **4. Time is of the essence**

*Statement:* The work of this task force is at risk of becoming irrelevant if business value is not exposed very early in the process. Time is of the essence.

*Rationale:* Every day, smart people in media companies are figuring out new ways to address business issues. Frequently, they are doing this using readily available Internet Technologies. Media companies and their suppliers face significant and growing pressure to increase their ability to adapt to a rapidly changing business environment. Many media companies believe that the only way to continue to be successful is to identify IT technologies that can be applied in professional media networks, and to identify areas where a lack of interoperability introduces friction in the content monetization process. To the extent that the Task Force is helpful in reducing this friction, the Task Force will be relevant. However, if the Task Force fails to produce useful output in a period of months to a year, the effort will

be wasted since it is likely that beyond that period of time, media companies will have made significant and unalterable investments in alternative, potentially proprietary solutions. An additional consideration is that new competitors tend to leverage the best Internet Technologies without the burden of legacy facilities. Producing timely output will help the industry to remain viable in the face of this competition.

*Implications:* The Task Force will be a fast-moving, focused activity, exposing useful output as soon as possible. We recognize that significant business value can be delivered early in this process by publishing smaller works quickly. (For example, we are publishing these precepts now rather than waiting to distribute them as part of a larger work.)

## 5. No new invention

*Statement:* The task force shall not call for the invention of new technologies without very good reasons to do so, and only in extreme cases when no existing solutions can be identified. That said, it is likely that the Task Force will help the industry coalesce around existing Standards or practices for application in the professional media space.

*Rationale:* The amount of R&D being expended by the IT industry, particularly in the area of video and audio, is significant. Additionally, we know that the size of the overall IT market dwarfs the professional media market. There is an extant body of work in the form of technologies, defined interfaces, successful software patterns, etc., and this body of work continues to grow rapidly. It is likely that a set of existing IT technologies can be successfully deployed to meet the user requirements identified in the JT-NM user requirements survey.

*Implications:* The Task Force will need to have sufficient (perhaps exhaustive) knowledge of existing technologies and trends in IT. It shall assume that solutions to problems already exist. It shall not recommend that new invention be undertaken until it has established that solutions do not exist or cannot be adapted to meet our requirements.

## 6. Leverage Internet Technology

*Statement:* It is a core tenant of the JT-NM effort that we shall enable media companies to leverage Internet technology

*Rationale:* The Internet is arguably one of the most significant technological inventions of mankind. It has spawned a host of useful, widely adopted technologies that are well-understood by millions of people. These technologies have the potential to unlock significant business value for media companies and vendors. While this precept does not imply that everything we do must run ‘over the Internet’, what it does say is that we shall look for opportunities to enable media companies, through vendors, to make use of the vast toolbox of technologies that underpin the Internet.

*Implications:* To the greatest extent possible, we shall employ approaches in the JT-NM effort that build on the massive investments that have been made in Internet Technology.

## 7. Avoid strong binding to legacy technology

*Statement:* While the JT-NM effort must support existing workflows, it shall not bind media companies to legacy artifacts such as non-integer frame rates or the SDI payload if those companies wish to be free from them. The JT-NM shall, to the best of its ability, develop a framework that is forward-looking, with an expectation that broad adoption of its recommendations will occur in three to six years.

*Rationale:* The JT-NM must walk a line between adopting new technologies and providing a migration path for users who cannot abandon existing technologies. The JT-NM will seek to enable the orderly migration of the industry from existing and legacy systems to future technologies. However, it is a fundamental requirement that the JT-NM shall allow media companies and vendors to leave behind legacy artifacts if they choose to do so.

*Implications:* The JT-NM needs to be vigilant not to ‘build in’ legacy technology. It shall provide a migration path while anticipating wide adoption of its work several years in the future.

## 8. Carefully optimize scope

*Statement:* The Task Force should focus on areas where it can add unique value, and it should avoid dictating things that are either impossible to implement, or have already been solved elsewhere. In the end, this Phase of the Task Force activity should deliver a flexible, constrained architecture.

*Rationale:* There are areas where the Task Force might be tempted to mandate the use of certain technologies or systems; network security and user authentication are two examples. Many different approaches to network security and user authentication are already in use. Deployment of these technologies is frequently dictated by corporate policy, so any time the Task Force spends on mandating the use of a particular approach will be wasted.

*Implications:* It is critical that the Task Force not only decide on what is in scope, but what is out of scope. It should consider whether each of its recommendations are likely to have any practical value.

## 9. Fast Fail

*Statement:* It will be better if this activity is terminated due to a lack of progress or participation, than to have it drag on indefinitely.

*Rationale:* The JT-NM activity is highly visible in the industry and tends to ‘freeze’ the activities of other groups. We need to either deliver, or get out of the way and let the industry come up with solutions through other means.

*Implications:* The JT-NM administrative group and the sponsors of the Task Force (EBU, SMPTE, and VSF) have an ongoing responsibility to the industry to evaluate the effectiveness of the JT-NM effort. They will continually determine the likelihood that the activities the Task Force undertakes are going to expose business value within the window of opportunity available to them. If it is determined that an activity has become ineffective, it is the responsibility of the administrative group and/or the sponsors to terminate the activity, or potentially the entire Task Force.

## Appendix A – Mind Map from meeting, April 30, 2014

