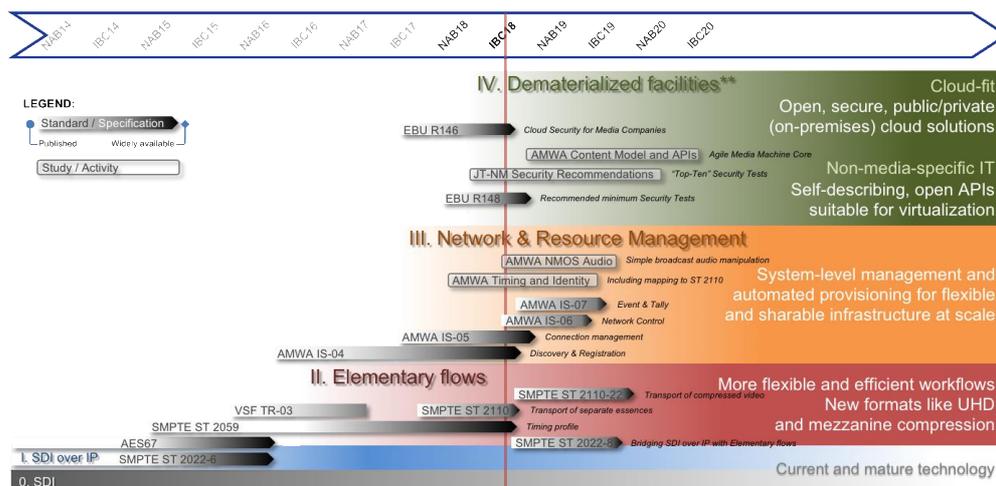


# FULLY IP-BASED PRODUCTION

Public service media are increasingly using generic IT hardware, networks and storage systems to produce their content and preserve their valuable assets. But evaluating such solutions and their ability to meet the specific demands of media workflows is not trivial. The EBU is helping its Members to make the right choices and cost-effective investments in their infrastructure.

## BACKGROUND

Once used mostly to move files around or control equipment, IP networks are increasingly becoming the core infrastructure of broadcast production facilities. One exception to this trend is live production, which still largely relies on SDI. But even here IP solutions are beginning to make inroads. Fully IP-based production is now a widely adopted industry goal; even though many pieces of the puzzle are still missing, several European broadcasters have built, or are planning to build, IP-based production facilities. There is an immediate and strong need for fully interoperable, plug-and-play-like systems using open standards.



The JT-NM Roadmap shows how the relevant technologies for networked media are evolving.

## THE CHALLENGE FOR PUBLIC SERVICE MEDIA

### Do more with less

The challenge of having to produce more content with limited resources in terms of budget, staff or time is not new to broadcasters. However, there is a natural limit to how far resources can be stretched with existing setups. New ways need to be found to increase efficiency and effectiveness in production. Most notably, new technology solutions are needed to automate processes and enable better workflows.

### Evolving content production

Producers and directors are always on the lookout for better ways to tell stories and add value to productions. Often this means using more live sources and requires easy access to recorded footage, stills, music, text and enriched data. The capabilities offered by consumer products (e.g. action cameras, drones, etc.) also raise the bar for professional media facilities and the success of their productions depends on matching audience expectations.

### Digital transformation

The digital transformation has a clear impact on consumption patterns. Audiences are able to consume more media at anytime, anywhere and on any device. This pushes media organizations to adopt new formats and repackage content for different media outlets. Highly automated and data-driven processes based on IT technology are indispensable aids to deliver on these expectations.

## WHAT IS THE EBU DOING?

The EBU's strategic programme Production Infrastructures helps Members in their transition to infrastructure based on IT networks in studio and remote production environments. This is done by studying the requirements of broadcasters, by sharing knowledge, experience and test results, and by providing updates on new technologies. Production Infrastructures also examines the impact of new IP technologies on operational and production practices and workflows. It offers guidance on the path to dematerialized production facilities using cloud technologies.

The EBU is also co-steering the *Joint Task Force on Networked Media* (JT-NM) in collaboration with the Advanced Media Workflow Association (AMWA), the Society of Motion Picture and Television Engineering (SMPTE) and the Video Services Forum (VSF). This industry-wide initiative aims to ensure interoperable, secure and full-stack network-based systems for live production.

In 2018, the EBU released the Live IP Software Toolkit (LIST), a suite of open source software tools that help to inspect, measure and visualize the state of IP-based networks and the high-bitrate media traffic they carry. LIST could be helpful during the vendor selection process, the project deployment/debugging phase or as a training tool for organizations planning the transition to Live IP.

## FIND OUT MORE

Strategic Programme: Production Infrastructures  
Live IP Software Toolkit  
Network Technology Seminar  
Joint Task Force on Networked Media

<https://tech.ebu.ch/liveip>

<https://tech.ebu.ch/list>

<https://tech.ebu.ch/nts2018>

<https://tech.ebu.ch/jt-nm-roadmap>