If a friend asked you what makes your organisation and industry so safe, what would you say? Our industry is often considered ‘ultra-safe’, and yet we rarely ask ourselves what keeps it safe. What are the ingredients of safe operations?

When we ask this question to operational controllers as part of the EUROCONTROL safety culture programme, it is revealing to hear how far outside of the ops room the answers extend. Operational work is of course done by operational people, but it is supported by a diverse range of people outside of the ops room: engineers and technicians, AIS and meteo staff, safety and quality specialists, technology and airspace designers, HR and legal specialists, procedure writers and training specialists, auditors and inspectors, senior and middle managers, regulators and policy makers.

Each of the above has an imagination about operational work – as they think it is, as they think it should be, and as they think it could be. (Operational also have some imagination about non-operational work!) We call this work-as-imagined. It is not the same as the reality of work activity: work-as-done. The degree of overlap depends on the effectiveness of interaction between operational and non-operational worlds.

This is important because non-operational imaginations produce regulations, policies, procedures, technology, training courses, airspace, airports, buildings, and so on. These need to be ‘designed for work-as-done’.

Designing for work-as-done requires that we bring together those who do the work and those who design and make decisions about the work. We have talked with over a thousand people, in hundreds of workshops, in over 30 ANSPs, to discuss work and safety. While there are some excellent examples of interaction and cooperation (e.g., new systems, procedures and airspace), there are also many examples of disconnects between work-as-imagined and work-as-done. Where this is the case, people have said to us that operational and non-operational staff rarely get together to talk about operational work.

With this issue of HindSight, we wish to encourage more conversations. But how? In their book Abundant Community, John McKnight and Peter Block suggest three ingredients of a recipe that can be used to bring people together.

1. Invitation

Think of the boundaries of your work community and your workplace. Is there a ‘welcome’ mat at the door, or a ‘keep out’ sign? Several barriers keep us apart:

• Organisational barriers: Goals, structures, systems and processes that define and separate functions, departments and organisations.
• Social barriers: ‘In-groups’ (us) and ‘out-groups’ (them), defined by shared values, attitudes, beliefs, interests and ways of doing things.
• Personal barriers: Individual choices and circumstances.
• Physical barriers: The design of buildings and environments.

We must look honestly at these barriers because by separating us they widen the gap between work-as-imagined and work-as-done. According to McKnight and Block, “The challenge is to keep expanding the limits of our hospitality. Our willingness to welcome strangers. This welcome is the sign of a community confident in itself.” Hospitality is the bedrock of collaboration.

How can we reduce the separating effects of organisational, social, personal and physical barriers, and extend an invitation to others, inside and outside our ‘community’?
2. Participation

The second ingredient is participation, of those at the ‘sharp end’ in work-as-imagined, and of those at the ‘blunt end’ in work-as-done. This requires:

- **Capability** (useful knowledge, skills, and abilities);
- **Opportunity** (the time, place and authorisation to participate); and
- **Motivation** (the desire to participate and a constructive attitude) (C-O-M).

Together, we try to understand **People**, **Activities**, **Contexts** and **Tools** (P-A-C-T) – ‘as-found’ now, and ‘as-imagined’ in the future (C-O-M-P-A-C-T).

The capability lies within two forms of expertise. The first is **field expertise**, held by experts in their own work – controllers, pilots, designers, etc. The second is **emergent expertise**. It is more than the sum of its parts and only emerges when we get together and interact.

But who are ‘we’? In his book *The Difference*, Scott Page of the University of Michigan’s Center for the Study of Complex Systems reviews evidence about how groups with diverse perspectives outperform groups of like-minded experts. Diversity not only helps to prevent groups from being blindsided by their own mindsets. Diverse and inclusive organisations and teams are more innovative and generate better ideas. This diversity does not only refer to inherited differences such as gender and nationality, but also diversity of thought, experience and approach. Multiple perspectives, including outside perspectives, are a source of resilience. If you are a controller, imagine a supervisor from another ANSP’s tower or centre observing your unit’s work for a day or so, and discussing this with you, perhaps questioning some practices. They would likely see things that you cannot.

How can we increase diverse participation in the development of policies, procedures, and technology, and in the understanding of work-as-done?

3. Connection

Among your colleagues, you can probably pick out a small number who are exceptionally good at connecting people. According to McKnight and Block, these connectors, typically: are well connected themselves; see the ‘half-full’ in everyone; create trusting relationships; believe in their community; and, get joy from connecting, convening and inviting people to come together.

Connectors know about people’s gifts, skills, passions – their capabilities – even those at the edge of the community. They know how to connect them to allow something bigger to emerge. They have an outlook based on opportunities. They have a deep motivation to improve things. They can sometimes be found at the heart of professional associations. People turn to them for support. Connectors are as valuable as the most distinguished experts.

Some people naturally have a capacity for making connections, but each of us can discover our own connecting possibility to help improve work-as-imagined and work-as-done.

Who are the connectors in your community, and how can they and you help to improve and connect work-as-imagined with work-as-done?

In this issue, you will read about work-as-imagined and work-as-done from many perspectives. In reading the articles, we invite you to reflect on how we might work together to bridge the gaps that we find.

Enjoy reading HindSight!