

COSMETICS EUROPE RESEARCH NEWSLETTER

ADVANCING THE LONG RANGE SCIENCE STRATEGY WORK ON ALTERNATIVES POST-2020



John Chave
Director-General, Cosmetics Europe

In the EU, animal testing of cosmetics products is a thing of the past. But the need for innovation in our increasingly competitive world, and the need to give our consumers the best and safest experience possible, are very much the things of the present and future. Developing ground-breaking scientific methods to test and evaluate our products without the use of animals is our industry's response to these challenges.

The **Long Range Science Strategy (LRSS)** is Cosmetics Europe's scientific research programme on non-animal methods. Started in 2016, LRSS was originally intended to run for five years but due to its success, our goal is now to continue the programme beyond 2020 - with the support of our members. The philosophy underlying LRSS can be summed up in three words: safety, innovation and trust.

Safety expresses our key objective – to develop new technologies for the safety assessments that must accompany the development of cosmetics products. We call these assessments "Next Generation Risk Assessments" - demonstrating that

what we are developing is a real break from the past and a technological leap forward.

Innovation works in two ways. The scientific methods we develop are cutting-edge in their own right. But we know our consumers have evolving needs and preferences, and the new methods also help us to develop products to meet those needs in a post animal testing world.

Our work at LRSS can only be successful when it is **trusted** by the community of scientists and the regulatory bodies engaged in the field. They need to have confidence that the new methods we develop are sufficiently robust to establish product safety. We invest in cooperation and dialogue with scientists and regulators to build trust both in the integrity of our approaches and in the spirit of science that underlies them.

All industries, if they are to survive and prosper, need to respond to broader societal concerns. The era of animal testing for industry in Europe, and increasingly beyond, is over. But dynamic industries like ours move forward - investing, evolving, discovering, creating. LRSS is not only a globally significant research programme, it is also an expression of our belief in continuous advancement and improvement.

DEVELOPING A SCIENCE & RESEARCH PROGRAMME BEYOND 2020

Rob Taalman, Science and Research Director, Cosmetics Europe

Cosmetics Europe's investment and innovation in research over several decades has established us as a trustworthy and indispensable research player. For evidence of our success, look no further than in key policies such as European Commission Regulation no. 440/2008 and the OECD test guidelines where our technologies are embedded.

Notably, Cosmetics Europe was a forerunner in the shift towards the development of non-animal research – we were already active in the SEURAT-1 programme. Today, the LRSS programme continues to pioneer non-animal approaches and Next Generation Risk Assessments (NGRAs) via a series of our projects that have already come before regulators.

The LRSS focus on systemic toxicity does not mean other subjects are excluded. On the contrary, our scientific work on

areas such as skin sensitisation genotoxicity and eye irritation have also made significant steps towards regulatory acceptance. The experiences gained from these historical, but still vivid, endpoints are levers in today's regulatory landscapes.

While most technical developments will have reached a sufficient level of maturity throughout the current LRSS, integrating all technologies, regulatory trust-building and advocacy should continue and be amplified after 2020.



THE ADDED VALUE OF THE LRSS: ITS SCIENCE ADVISORY BOARD

The Science Advisory Board (SAB), inaugurated in October 2017, is an independent consultative body that advises the LRSS Steering Committee on the scientific strategy and monitors progresses of the programme. The SAB:

- helps identify knowledge gaps, rank them, suggest research priorities and propose solutions;
- evaluate fit-for-purpose of the programme, evaluate sustainability and suggest possible collaborations;
- advises on best ways for obtaining regulatory acceptance.

The first Science Advisory Board meeting took place on November 2018.

Ten key points from the SAB assessment of the LRSS

1. LRSS science is of high quality – there are no specific gaps or weaknesses to be addressed.
2. The LRSS approach facilitates a paradigm shift in safety assessment i.e. move to Next Generation Risk Assessment.
3. The integration of Toxicodynamics with Toxicokinetics is very much appreciated and seems very promising.
4. The continued use of case studies is encouraged. Their quality is excellent and they should be used for stakeholder engagement.
5. LRSS is a great opportunity to engage with regulators internationally – seek further alignment with ICCR (International Cooperation on Cosmetics Regulation).
6. Cosmetics Europe should be proud to have such a research programme. More effort is needed to make LRSS's substantial activities and results better known to the outside world, including being more explicit about their impact on the industry.
7. To accelerate regulatory acceptance of New Approach Methodologies and Next Generation Risk Assessments, LRSS needs to engage at the level of Organisation for Economic Cooperation and Development.
8. Cosmetics Europe's research has earned the organisation a seat at the table at scientific and at regulatory events. Now it is time to think more about how to increase its impact.
9. As LRSS evolves, increased efforts can be made to reinforce arguments around the value of the LRSS in the innovation ecosystem and the opportunity it creates to introduce new ingredients.
10. Build on the strength of existing collaboration and networking by exploring further possibilities for collaboration with IMI, other EU funded Horizon projects, ILSI and other industries e.g. CEFIC and/or AISE.

SHAPING THE COSMETICS EUROPE SCIENCE PROGRAMME BEYOND 2020

Scope

Systemic toxicity will remain at the core of the future programme, however the scope will expand. Strengthening the industry's capability and expertise to manage environmental concerns about ingredients and products will be an integral part of our work. Cosmetics Europe members have the opportunity now to agree on emerging topics that require a collective research effort and investment (safety assessment of mixtures and endocrine effects, biodegradation of polymers and environmental fate of e.g. UV filters among others).

Promoting regulatory acceptance

The future programme aims to focus on the promotion of the use of NAMs and NGRAs for decision-making. Regulatory acceptance can be an intense and long process where we are expected to continually prove that the new is as good as - or better than - the old. The future engagement programme will focus efforts on building confidence and increasing trust, especially of regulators, based on best science and open communication. A collaborative effort is often helpful: strategic partnerships such as those with US EPA, EU Horizon 2020 projects, Horizon Europe Projects and other research initiatives such as the Cefic LRI could be deployed.

Certainly on the post-2020 agenda there will be a dedicated education and communication programme. It will incorporate training for Cosmetics Europe members and for external stakeholders - going beyond regulators to regional (e.g. NICEATM, EURL ECVAM), national and international (e.g. OECD) organisations. Communication activities will include developing peer reviewed publications and presentations at key meetings and conferences.



SAB MEMBER THOUGHTS ON LRSS: A SNAPSHOT

Professor Bob van de Water, Leiden University (The Netherlands): *"The strength of the programme has been its toxicokinetic aspects, involving both the exposure side of the equation as well as the further refined toxicokinetics analysis based on experimental work and in silico work. On these aspects the LRSS programme has strong expertise within the CE partners but has also ensured collaboration with key players in the field."*

Professor Maurice Whelan, Joint Research Center (Italy): *"The LRSS case studies are very good and should be a vehicle for the engagement with regulators. LRSS is a state-of-the-art programme."*

Professor Bas Blaauboer, Utrecht University (The Netherlands): *"In my view the LRSS programme has the ability to reach its goal to enable animal-free safety assessment of chemicals and cosmetic ingredients."*



Cosmetics Europe
the personal care association

The Cosmetics Europe's Long Range Science Strategy has the ambition to apply New Approach Methodologies (NAMs) and implement them in Next Generation Risk Assessments (NGRAs) for the safety assessments of substances, and in particular of cosmetic ingredients. For more information, visit www.lrsscosmeticseurope.eu