Your Excellency Mr. Opstelten,

Representative of the European Committee Mr. Markus Walter,

Dear ladies and gentlemen,

It is a great pleasure to welcome you all, in such large numbers to The Hague, the city that we like to call *the international city of peace and justice*.

For us as organizers it is of course a wonderful thing to see that so many of you have taken the time to come here, from more than 50 countries.

We have a very interesting week ahead of us and we've done everything in our power to make the conference a success.

In my opinion the list of speakers is terrific, so I am confident that your stay here in The Hague will be both interesting and pleasant.

The theme that we have chosen for this conference – "towards forensic science 2.0" – reflects our belief that the forensic sector is going through major change. This transition concerns not only forensic science itself, but also the way in which the forensic science sector is organized and managed.

Let's look at my own organization, for example – the Netherlands Forensic Institute. The number of cases we handle has increased by a factor of six in the past decade alone. Since the start of the 21st century, the number of employees has almost tripled, growing from 200 to 600. In fact, the field of forensic science world wide has grown more in the past ten years than it has in the fifty years before that.

Clearly, the forensic community has been a hugely successful lately.

The most important reason for this growth, is the way science and technology have been developing. Due to this, new traces have become available for forensic investigation. DNA traces and digital traces are obvious examples.

And this turned out to be extremely useful, because in modern society, it is really not that easy to do anything without leaving DNA traces, or digital traces, or both. The physical world and the digital world live in a kind of symbiosis nowadays, with profound consequences for forensics.

At the NFI these two fields have been the main drivers of growth. And in this week's program they are certainly well represented. However, twenty five years ago these departments didn't even exist. Clearly something is changing in our field.

Another reason for the growth in forensic science, is simply that it is not only very effective, but also very efficient. Forensic science is a relatively cost effective and quick method to get high quality information. Traditional investigative methods are often more expensive because they require a lot of work by police investigators. So forensic science saves money, which is an important notion in times of financial constraints.

As science and technology will continue to develop, the demand for forensic services will continue to increase. As is so often the case, new science and technology create their own market.

Nevertheless, the success of forensic science has created problems of its own.

In most countries there is no mechanism to balance supply and demand. When demand goes up, capacity does not necessarily keep pace. A consequence of this is that many forensic institutes suffer from large backlogs and long delivery times. The Netherlands was no exception to this. At one time, about 5 years ago, the NFI had a backlog of around 18.000 cases.

From the customers' point of view, this was a huge problem. To them, high quality results delivered too late, are *useless*. Getting rid of the backlogs and decreasing delivery times has therefore been a top priority for us. Fortunately this problem has been solved now, and I know that many colleagues around the world are also working on it.

Another characteristic of the forensics sector, is the fact that it is still quite fragmented. That is, most forensic labs only serve the geographical jurisdiction of their main client. Often they have only one client, for example a police force, or a prosecution office. However, it is not realistic to assume that all of these local or

even national institutes can be *state-of-the-art* in every single forensic discipline. Or that they can have critical mass to ensure continuity and quality.

As the field continues to mature, different forensic laboratories will increasingly develop their own special capabilities. Capabilities that only they have. This will create an irresistible driver for cross-border exchange of forensic services. And it will also stimulate research and development. Investments that may not make sense on a local level – because the relevant case load is too small there – may be sensible on a regional or even global level.

In other words, international cooperation will increasingly become a top priority. Which, by the way, is one of the many reasons why it is such a good thing that we are here together in The Hague.

In the spirit of this internationalism, there are currently initiatives to create a European forensic area. Especially Poland has played a crucial role in getting this on the agenda. The idea is that this could facilitate a free flow of forensic services. The NFI strongly supports these initiatives. One important element of this forensic area would be to establish common minimum quality standards that are accepted by all member countries. In this way, international cooperation *in cases* becomes much easier.

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A related trend in forensics is a broadening of the customer base. Demand for forensic services from *outside* of the criminal justice system has increased significantly. More and more customers – mostly government agencies or intergovernmental organizations – find that forensic science can provide answers to their problems. Ministries of Defense, intelligence services, anti-terrorism authorities, are all discovering what forensic institutes have to offer. Today, the NFI has dozens of clients outside the criminal justice system, and even outside the Netherlands.

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Let me now spend a few minutes talking about scientific matters. Forensic investigations are often performed by individual skilled professionals, each with their

own area of expertise. In the past, deep interdisciplinary cooperation was rare. And the work itself often resembled an art as much as it did science. To put it differently, the scientific basis of some disciplines was – and still is – relatively weak. Subjective human interpretation based on personal experience still plays a significant role.

In my opinion, strengthening the scientific basis of forensic investigations – and making findings more objective – is therefore one of the grand challenges of our field.

At the same time I believe that the forensic community should strengthen its commitment to R&D, from basic research – funded partially by national science foundations – to product development. Especially with regard to this latter category, public/private partnerships can play an extremely important role. Often developments in areas such as health care, the computer industry or the biotechnology sector, can be converted into powerful forensic tools. This type of domain transfer is stimulating innovation in the forensic field, and some of the companies that are involved in this are here at the conference. Their ideas will help us create new products and services that will deliver more value, at higher speed, and lower costs. During this conference we will see examples of this.

For domain transfer to work, innovative organizations must be willing to work together closely in an ecosystem – or cluster – of organizations from different fields. Sometimes the government can play a very active role in creating these clusters. I am happy say that the city of The Hague has been doing precisely that. The cluster they are creating has been given the name *The Hague Security Delta*. The deputy mayor of The Hague – mister Kool who is here with us today – has been driving its development with incredible energy and skill. If you have a chance, talk to the people from the city of The Hague, and see how your organization may contribute and benefit.

## In conclusion

Ladies and gentlemen, I have highlighted a number of trends that we as a community face.

All of these trends are changing forensic science from a relatively small and closed field of skilled professionals, to a dynamic and international sector of innovative high-tech organizations. These changes will impact us all, and I am certain they will be discussed at length during this conference.

I am excited to see what you will all contribute this week. I also hope that by the end of the week you will be inspired, motivated, maybe even surprised at what you've heard. Certainly there will be lots of time to socialize and extend your networks with new friends.

I wish you all a very fruitful conference and a very pleasant stay in The Hague.

Thank you for your attention