

Dear listeners,

Today, on the anniversary of the signing of the Tartu Peace Treaty, I want to talk about peace. More precisely, about how to achieve peace, and how to maintain it.

One year ago, on the 90<sup>th</sup> anniversary of the treaty, I said, and I quote:

*We have to realise that the state of security policy in Estonia depends on the everyday work we do, the contribution we make, how seriously we are taken and how determined we are, not on signatures, whether they be on the Tartu Peace Treaty or a NATO charter.*

End of quote.

Or in other words, we do need legal documents, but they are not enough to maintain peace. We have to provide the content for those documents. We have to do everything we can to ensure a lasting peace.

Vegetius, a Roman expert in the art of war, wrote in his *De Re Militari* or "On War": *si vis pacem, para bellum*.

If you want peace, prepare for war.

Over the centuries this sentence has been interpreted more broadly, as the need to be strong in order to secure peace. And that is the basis of the defensive position of every peaceable nation.

So it is in Estonia. We can protest – and we often do – that Estonia's size does not allow us to do anything. But in so doing we tend to forget that strength lies in what you do.

We tend to forget the key lesson we learnt from what was a victorious War of Independence: in battling two enemies, our strength lay not in numbers or in superior armaments.

What brought victory to Estonia was our spirit: the people's determination to exist as an independent nation. We fought for what was right, and we won the war.

Ladies and gentlemen,

In focussing on war and peace we are used to thinking in terms of categories related primarily and directly to violence. Forces move in, something is destroyed, people are killed and wounded, prisoners are taken. All of this today is referred to using the term "kinetic".

This word, which comes to us from physics and is used to denote movement, is used in the military sense because modern warfare also recognises other forms of battle.

As Carl von Clausewitz one said, war is the continuation of policy by other means. And those means are not necessarily "kinetic".

What is important is your target – the objective of what you are doing. To quote von Clausewitz further, he went on to say that war is an act of violence intended to compel your opponent to fulfil your will.

Ladies and gentlemen,

We live in an information technology world. Geographic proximity and the traditional kinetic conflicts associated with it are now only one of the dangers we face. As such, we need to look at *si vis pacem, para bellum* once again and give it a more contemporary meaning.

We need to realise that the image emblazoned on our collective memory of the enemy's tanks rolling into Estonia beneath an upraised boom gate is now far from being the main way in which our country can be compelled to fulfil the will of its opponents.

In 2007 we saw how Estonia's Internet-based infrastructure was attacked – without a shot being fired or a single soldier setting foot on our soil – with the aim of inflicting injury on our economy and the functioning of the state. The flood of enquiries that engulfed our servers meant we were unable to pay bills in our online banks; we were unable to keep up with the news; and we were unable to make use of the e-state services with which we were familiar and comfortable.

Today we know that that attack was technically rather primitive and short-lived, which in the view of a number of experts in the field stemmed from a public-private partnership.

In 2008, the method of attack implemented against Estonia was introduced in kinetic warfare. As an analyst and cyber security officer from the State Department in America recently explained, specific times were issued via social media to launch attacks against certain Georgian websites with the aim of causing a shortage of information and creating confusion. More importantly, this all took place as part of a highly coordinated series of kinetic attacks.

This is a huge step forward from December 1924, when the primary target of the coup leaders was the telegraph network. But although times and means might have changed, the aim remains the same: to overwhelm or at least temporarily disable ways in which people communicate.

Last year we bore witness to an even more effective weapon being wielded in the cyber war: the Stuxnet virus, which was used to attack the management system of Iran's nuclear programme. Its proper name is SCADA – an automated management and data system which is in fact used almost everywhere.

Such viruses are capable of crippling power and telephone systems, without any form of kinetic force being applied; they could also stop food stores from being supplied with the everyday items we all need and use.

Ladies and gentlemen,

I do not want to linger on or list and describe the new threats we face today. Instead I would like to draw your attention to the fact that Estonia needs to be taking new dangers and new security risks into account. When we talk about war and peace, defence and security, we have to think in terms of very different categories to those we considered 91 years ago.

True, it is highly unlikely that cyber attacks alone could bring a modern democratic state to its knees, or worse. Effective cyber defence adds to our sense of security, reassuring us that we are not "easy prey" to attackers with serious intent.

And there is at least one very good side to all of this: while I referred earlier to our tendency to think of Estonia as being too small, in the field of cyber defence at least we are far more powerful than many countries which are much larger than us in terms of population and size.

Our knowledge, our skills, our preparedness and most of all our dedication to the issue show that we are capable of contributing much more to the overall security of NATO and the European Union than people think.

NATO's Cyber Defence Centre in Tallinn is one of the 15 centres of excellence around the world today dealing with the new security threats we face. Should the European Union's Information Technology Agency be based in Estonia, it will enhance the role we play in this field even more.

In this way, Estonia is defending Western democratic values from those who do not share them. We are defending the same values for which our forefathers fought 90 years ago in the War of Independence.

Dear listeners,

Our achievements in the field of cyber defence to date have been great, but we cannot afford the luxury of self-satisfaction. The cyber world is developing at an enormous pace, and what today may be considered an advantage could tomorrow be seen as an additional risk.

Among the opportunities that are open to Estonia, I first and foremost see much closer cooperation on cyber security with other countries at the forefront of information technology, such as Finland, Sweden and Ireland.

Estonia is already working very closely with these Member States of the European Union, as well as with our NATO partner Norway, as part of the Nordic Battle Group. We should be asking ourselves: if our cooperation in the field of "kinetic military capability" is as good as it is, why not look for common ground on security too in areas where our achievements are much more prominent? In other words, couldn't the homes of Nokia, Ericsson and Skype work together to develop a joint cyber defence capability?

As the director of security for Telia-Sonera remarked to me during my recent state visit to Sweden, international cooperation on cyber defence remains at a much more basic level than cooperation in most other fields.

There is a reason for this, of course, and a significant role is played here by the fact that neither Finland nor Sweden are members of NATO. That said, it should be very clear that the initial and ongoing development and maintenance of an effective cyber defence system will not be possible without cooperation between Europe's leading IT nations.

Logically, the next question is one we must ask ourselves: what are we doing, right now? Resting on your laurels in the rapidly developing field of IT and cyber defence means being left behind almost immediately and, in turn, heightened risk.

We know that Estonia lacks the 500 or so properly IT-educated workers it needs every year to modernise and advance its economy. And if we look at our military needs, the lack of specialists we are facing is even more serious.

Thankfully, a debate is ongoing at the national level in terms of establishing an IT Academy in Estonia. In my view, serious consideration should be given to adding a cyber defence module to the curriculum, since in any case Estonia already has some of the world's leading experts in the field at its disposal. Not to mention that there is far too little true scientific input in the development of defence in Estonia. We know that it is here that we should be looking for the biggest sources of financing of researchers and research institutes from NATO Member States.

Ladies and gentlemen,

In my talk today I have come quite a long way from the Tartu Peace Treaty. But in the same way, the Republic of Estonia has come far from the armoured trains and school boys who volunteered to go to the war that brought us peace.

In so saying I do not think, of course, that defending Estonia's independence now means cyber defence capabilities first and foremost. On the contrary: traditional roles are as important as ever for our defence forces, which are becoming more and more modern all the time. But in addition to the "old" challenges of national defence, we are facing new dangers, including cyber attacks and the need, with our allies, to fight them.

One thing though is clear: the Estonia that was created with the Tartu Peace Treaty must endure. To ensure this, we must defend and bolster our peace every day. And if we are to achieve this, we must know what our strengths are, as well as where our weaknesses lie. Reinforce one and address the other.

Let us not forget that in signing their names on the peace treaty, the leaders of our nation expressed a clear determination to secure a sure and safe future for their people.

We know that pressure was placed on Estonia at the time not to sign the treaty. But the needs and interests of the nation and the faith that our leaders had in their people's willingness and ability to forge their own state and determine their own fate overcame this opposition.

That is something which we should set as an example for ourselves today. Only by thinking and acting in this way have we managed to restore our independence and make all of the key decisions that have needed to be made in the last twenty years.

We alone can decide what is best for Estonia and its people. And that is the way it shall remain – it is our duty before those who established and defended our nation to ensure that it does.

Thank you.