Speech of Dr. Miro Cerar, Prime Minister of the Republic of Slovenia at the opening ceremony of Exhibitions 1001 Inventions – 1 April, 2015 / GR-Ljubljana Exhibition and Convention Centre

1001 INVENTIONS – DISCOVER THE GOLDEN AGE OF ISLAM CIVILIZATION

Dear Mayor of the City Municipality of Ljubljana, Mr. Zoran Janković, Dear management of the GR-Ljubljana Exhibition and Convention Centre, Dear high representatives and other guests, Ladies and gentlemen,

Not long ago, I had the honour to participate in the ceremonial opening of the Home Fair on the premises of the GR-Ljubljana Exhibition and Convention Centre, where numerous interesting solutions and ideas, we could add: inventions for improving and embellishing our living spaces, were presented. I am glad that only two weeks after that fair, there is a new, interesting exhibition opening its door: the *1001 Inventions – Discover the Golden Age of Islam Civilization*.

I want to thank the organizers and all participants for having prepared this new, interesting exhibition. Thank you for all your diligence and enthusiasm which strengthen our common hope for a better future, proving that a good idea, strong will, and work and co-operation are always a key to success.

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What, actually, is an invention? Above all, it is something created anew, especially in technology. An invention usually makes our lives easier because we can perform things in a new, more efficient, often easier way. The way to an invention, however, is typically long and demanding, requiring an extraordinary inspiration on one hand and often hard and patient work on the other.

There were several eras in history which are considered more or less progressive. Progressiveness of a civilization is measured, among other criteria, also by the number of new discoveries and inventions which are born in that period. In Europe we are relatively well acquainted with the achievements of great old civilizations such as Egyptian, Greek and Roman, and to a lesser extent also with more remote ones, e.g. the Chinese. I dare estimate that our knowledge of Islam civilization is not yet sufficient. We know too little about its significant contribution to the development of science, and within a bigger picture, also about its contribution to the development of Western and global civilization. This is why the exhibition we are opening today is most welcome.

In Europe, the period from the fall of Western Roman empire to the beginning of the Renaissance - the European Middle Ages - is generally considered a time of stagnation in science and development. In this time, Islam civilization took the leading

role in many areas. It became a bridge between Europe, Africa and India, and preserved the classical antiquity knowledge, which it upgraded in many aspects. The Western world still uses Arabic numbers and words such as *algebra*, *alcohol* and *zenith* without being aware of their origin. Many of us cannot imagine a life without coffee. And this is just a tiny bit among the inventions and discoveries of Islam civilization. We could say that with various contents, Islam civilization is connected to the very core of European civilization and to a certain extent inextricably embedded in it. As a saying from the 19th century goes, "Islam is a sea where you can catch any fish you want."

Every day we take and make public a zillion of pictures of our everyday lives. The foundations of modern optics, which is also the basis of every modern camera, were laid back in the 11th century by Ibn al-Haytham, a Muslim mathematician and astronomer. This year we celebrate 1000 years from the publishing of his *Book of Optics*. It is no accident that the United Nations has declared 2015 the International Year of Light and Light-Based Technologies, with the purpose to raise the awareness of the positive influence of light on human health and well-being.

The genius of human spirit is infinite and it is the basic drive behind social progress in all periods of human history. But the genius alone is often not enough. Easier and faster social progress is very much helped by favourable social conditions which encourage and support science. Science knows no boundaries, dispels stereotypes, and can strengthen social awareness. The Government of the Republic of Slovenia is aware of the importance of quality education and the development of science for development and successful social cohabitation. Right now, when we have not yet risen from the crisis of values and, consequently, from the financial, economical and social crisis, all of us must invest all our efforts to encourage all those ideas which will help us transcend ineffective and harmful practices of the past and which will - on one hand with awakening universal human values, and on the other hand with inventions in all areas - guide us to an even better and more developed society.

As mentioned above, the word 'invention' usually reminds us of achievements in technology. But there are other important human inventions such as state, religion, politics, democracy, and human rights. These concepts have been discussed and gradually mentally and practically built in society by some greatest human minds. An invention, be it a technical or humanistic one - if I remain with this broader view - begins with an idea which eventually materializes in a product. A duty of a contemporary state, which aims at development and progress, is to create an environment which encourages creative and innovative thinking, as well as circumstances which enable testing and implementation of new ideas. Among other things, the state has to provide an adequate protection of inventions through patent legislation which provides adequate legal protection of inventors and their achievements. Because of these and many other reasons it is so important that we live in an orderly state with a stable legal and political system, which is long-term committed to creating an attractive and stable business environment. Only in such

environment, good ideas can find fertile ground. But the responsibility for such environment lies not only on the state but on all of us citizens who, in this role or another, co-create its value-related, political, cultural and last, but not least, social foundations.

There is a common belief that the 20th century was so far the one when science prospered the most. Never in the history of humankind has the development of science, technologies, and inventions been so rapid. Man invented the car, the plane, penicillin, a heart was transplanted for the first time, astronauts travelled to the Moon and back. We developed a social state and strengthened democracy and human rights. Not everywhere, of course, and in many places not enough. But there is a big progress. Unfortunately, the 20th century also witnessed inventions which brought humankind during two world wars and many local wars and conflicts in an era of deep darkness. But even in the worst darkness, there is germ of new light, and this very big ambivalence is a call that all ideas, inventions and human activities must be monitored by our hearts. A long time ago, our hearts invented or discovered love and humanity, which should be the fundamental motif of every true researcher. And when the mind and the heart are united in the best sense, their inventions serve the good and noble in each of us - and this is what we need to strive for, individually and together, in the 21st century.

So may the beginning of the 21st century be a special challenge for humankind. Let's pave the road to this century with a great measure of hope and striving for peace, knowledge, respect to everything living, and a sustainable development of human society. May we be inspired, encouraged and helped also by the golden era of Islam civilization and all its inventions and other achievements which keep exciting our spirit, awakening a desire for the new, the good and the best in us.

Thank you for your attention.