13TH GLOBAL FORUM ON TOURISM STATISTICS
17-18 November 2014, Nara, Japan

SUMMARY OF THE FORUM

Tokyo, Paris, Luxembourg, 3 December 2014

The Japan Tourism Agency, the Nara Prefecture, the Organisation for Economic Co-operation and Development (OECD), and the Statistical Office of the European Union (EUROSTAT) have co-organised the **13th Global Forum on Tourism Statistics**, on 17-18 November 2014 in Nara, Japan. For the first time in history, the Global Forum on Tourism Statistics was held outside Europe to recognise the 50th Anniversary of Japan's accession to the OECD, and the emergence of the wider Asia Pacific region as a driving force behind global tourism growth.

The Forum is an international platform for the exchange of views, experiences, developments, and improvements in tourism-related statistics. The discussions at the Global Forum on Tourism Statistics are contributing since 20 years to support a better measurement of tourism by transferring knowledge for the development and use of tourism statistics. The Forum also enhances close links between producers and users of tourism statistics. All papers and presentations are available on the website of the Nara Tourism Statistics Week.

The opening session included addresses from Ms. **Yumi Yamaguchi,** Vice Commissioner, Japan Tourism Agency, Mr. **Yoshinao Fukui,** Director General of the Tourism Bureau, Nara Prefecture, Mr. **Stefan Kapferer,** Deputy Secretary-General, OECD, and Mr. **Christophe Demunter,** Head of the tourism statistics team, Eurostat.

In his keynote speech, Mr. **Armando Peres**, chairman of the OECD Tourism Committee, outlined the role of the OECD in economic analysis and measurement, and the leading role of the Tourism Committee in driving the global agenda on tourism policy and statistics, including for the co-development of the Tourism Satellite Account, for its work on measuring competitiveness in tourism, for producing international benchmarks such as *OECD Tourism Trends and Policies*, and for disseminating, via OECD.Stat, tourism data readily accessible, open and free for use by policy-makers and industry.

The session 1 **Measurement and economic analysis of regional tourism** was led by Prof. **Douglas Frechtling** from George Washington University.

Mr. **Alain Dupeyras**, Head of Tourism, OECD, highlighted the growing role of the sub-national level in tourism development. A number of challenges for countries in developing qualitative statistical systems on tourism at sub-national level were identified. Comparability, timeliness and disaggregation are the main issues for measuring tourism data at sub-national level. Mr. **Dupeyras** reported on the OECD initiative for collecting and analysing initiatives of sub-national tourism statistics. Information on the terms of governance of these statistical projects, the source of funding, the statistical and methodological approach and their key results promises that all participating institutions and parties will learn and transfer their knowledge to organizations that plan similar type of initiatives in their country.

Prof. **Hervey Gibson**, the representative of a group of researchers from Glasgow Caledonian University was then presenting the DREAM trip project. DREAM trip aims to use the International Passenger Survey and the Great Britain Tourism Survey as a framework to integrate monitoring of the local visitor economy at community and destination level on a monthly basis into a rigorous national and social accounting framework. The authors addressed data quality issues, issues of geographical and temporal disaggregation, information management issues and computer implementation.

Prof. **Patrizia Modica**, the representative of Italian scholars from the university Cagliari and the State University of Milan Bicocca was then presenting a conceptual paper about how to build a tourism impact monitoring systems at sub-national level. In their case study on South Sardinia, they started with the development of a Regional Tourism Satellite Account system combining macro-economic indicators with survey based information. The system proposed is still work in progress but has the potential to become a prototype that can be extended to any Italian regions.

The final paper was presented by Mr. **Takehisa Tonomura,** the representative of scholars from the Graduate School of Engineering and Design at Hosei University describing a project where data of the phone data book by NTT were combined with data of tourism facilities giving a spatial distribution of indicators which are visualized for supporting decision processes of tourism policy makers.

The special session focused on **European and Asian case studies of tourism statistics**. The report from Asia pointed out that statistics on inbound tourists have been prepared in many countries, but

domestic statistics are not available, so at present the effect of tourism on macro-economy cannot be determined in many countries. The need for measures was also emphasized. The report from Eurostat gave an overview of the governance of tourism statistics in the European Union and stressed the crucial need to establish common definitions and standards as a tool for harmonization and comparability – thus better user relevance.

The session 2 **The analysis of demand-side behaviour and consumption** was chaired by Mr. **Hiroyuki Kamiyama** from the Nomura Research Institute.

Dr. **Peter Laimer** from the Austrian Statistical Office and Mr. **Ulf Sonntag** from the Institute for Tourism Research in Northern Europe presented a longitudinal comparative study on the German Travel Survey and the Austrian travel behavior survey, latter also called Microcensus. The purpose of this paper was to highlight similarities and differences between the two most significant tourism surveys in German speaking countries. The comparative analysis not only covered methodological and financial aspects for operating such big surveys, but the authors also provided some insights in communalities and differences of German and Austrian travel behavior. This presentation was a good example for what could be achieved if producers of statistical sources would be more willing to share and compare the findings of their studies.

The next paper by Dr. **Sarath Divisekera**, College of Business at Victoria University, used data from the Australian National Visitor Survey where he aggregated 21 items of consumption expenditure data into five commodity groups, estimated nine demand systems, eight regional models and one national model based on a pooled sample. Overall, the demand for the five commodity aggregates, which included Accommodation, Food, Transportation, Shopping, and Entertainment, were found to be relatively price inelastic where the degree of price sensitivity varied across the commodity aggregates and different regions. Income and cross-price elasticity indicators are only a few examples for a number of important economic parameters which were reported at sub-national level in the study. Moreover, the major differences across regional indicators suggest that policy analysts need to be cautious when using aggregate economic parameters for policy formulation.

Three other papers focused on measuring tourism demand in emerging or recovering regions. The first two papers were case studies by Mr. **Dilip Kumar Bhadra** from Bangladesh and Ms. **Mila Hertinmalyana** from Indonesia which try to understand the drivers of tourism demand from a market of origin point of view. The last paper by Ms. **Lingling Wu** from Institution for Transport Policy

Studies analysed the tourist behaviour after the Great East Japan Earthquake, in particular the impact of this major disaster on the travel behavior of visitors from China and Korea. The outcome of a multinomial logic model suggested various indicators that had significant influence on tourists who decided to cancel their trip to Japan. The findings are certainly very valuable and important for destination officials, tourism policy makers and hazard management agencies.

The session 3 **Using big data for tourism statistics** was chaired by Mr. **Christophe Demunter** from Eurostat.

Two papers focused on the use of mobile positioning data for measuring tourism flows and one paper on the use of electronic card transaction data. Mr. Margus Tiru presented the first paper by a consortium of European project partners who carried out a feasibility study funded by Eurostat which investigated the technological, methodological and economical barriers and limitations of accessing and using data from mobile devices for generating tourism statistics.

Investigations about how to use data from mobile positioning data for tourism have also been carried out by Ms. **Mihoko Aizawa** and Mr. **Ryogo Henzan** representatives from the JTB Foundation and Okinawa Prefectural Government and Mr. **Toru Odawara**, Docomo Marketing. The authors demonstrated in their study about how this new forms of data can enrich a traditional data source like the domestic visitor survey which has taken place in Okinawa annually since 1972.

Ms. **Rebecca Burson**, the representative of the Ministry of Business, Innovation and Employment in New Zealand recently released two new regional tourism data collections that utilize electronic card transaction data. Two new reporting systems deliver information on monthly reports on card spending and estimates of absolute spend for the current year. The latter system, called 'Regional Tourism Estimates', uses a iterative proportional fitting method so that the data from card transactions matches total tourism expenditure by industry from the Statistics New Zealand's Tourism Satellite Account (TSA). Similarly, an own weighting system was developed to reflect the distribution of international expenditures by visitors' country of origin as in New Zealand's International Visitor Survey.

Ms. **Valeria Shapoval,** University of Central Florida, then presented some methodological principles for data mining and their application to an inbound visitor dataset in Japan. She stressed the growing importance of explorative rather than confirmative studies and informed the audience about the role of data mining and real-time data analysis for meeting the needs of future data sources which will be

increasingly complex and big.

The session 4 **Utilizing tourism statistics for business and policy analysis** was led by Dr. **Tadayuki Hara**, University of Central Florida.

The purpose of the first paper by Prof. **Hideki Furuya** from a consortium of scholars of different universities in Japan was to develop an index which describes the attractiveness of East Asia, Southeast Asia and Oceania countries. The index is a quantitative measure consisting of the number of international tourists arriving in a particular destination weighted by the reciprocal value of the travel distance between a market and a destination. The application of travel distance as gravity indicator is a very nice approach which should be more often applied in destination benchmarking.

Ms. **Ana Moniche Bermejo,** representing the Andalusian Tourism Government and the University of Malaga in Spain, then presented their pilot study for developing a sustainable tourism indicator system. The authors suggest more than 300 indicators categorized in seven key areas and 40 key topics. Weights for aggregating the indicators within each key topic are generated by a survey among approximate 100 tourism experts and the weights for the seven key areas are defined by policy makers. The proposed approach has its merits although the explanatory power of such a model needs some further investigation.

The application of the TSA in a regional context was the focus of the following presentation by Prof. **Egon Smeral** from the Austrian Institute of Economic Research and Professor at MODUL University Vienna. The paper's aim is to extend the TSA with respect to the indirect effects of tourism and the leisure demand of residents in their usual environment. Prof. Smeral introduced an extended analytical framework of a Regional TSA and demonstrates its usefulness by presenting a case study for Upper Austria, one of nine provinces in Austria.

Nautical tourism, as a special touristic product and industry, is not well reflected in current methodological frameworks for measuring tourism statistics. Mr. **Neven Ivandic** from a group of researchers at the Institute for Tourism in Zagreb, Croatia have investigated the economic impact of this sector in Croatia and identified various problems which need to be addressed when current statistical frameworks are applied to this industry.

Prof. **Aneme Malan** from Stellenbosch University stressed the importance of measuring sustainability and the limitation of traditional indicators for measuring success in tourism development. Their arguments for collaborative action with meaningful public, private and civil society engagement were a central topic in the following discussion. The paper was a very challenging one since it requires a radical change in our current way of thinking.

The final paper by Prof. **Shimizu** and Mr. **Seunghwan In** from Tokyo Metropolitan University introduced a model for estimating CO2 emission volume in the tourism industry. 27 industries in Japan and Korea were analyzed and compared in this study. The outcome is quite alerting as both Japanese and Korean tourism industries appear to emit significantly more CO2 than the average of all other industries. Not much surprisingly, the transportation sector was identified as by far the biggest emitter in the tourism industry.

In his concluding remarks after his review of all papers, the rapporteur, Prof. **Karl Wöber,** identified three important trends which have the potential of shaping discussions at future Global Forums on Tourism Statistics. The first trend is the growing number of open and linked data initiatives which we can observe in tourism. This need stems out of the interest of Destination Marketing Organisations and other policy makers to support the decision making process of businesses in the micro structured tourism industry. In this context the quality of communication of findings and data visualization becomes important. The second trend stems out of the growing number of initiatives to combine data from multiple data sources. Initiatives that, for instance, combine results from big data projects with traditional sources of tourism statistics usually require special considerations and methods. Finally, there are few studies which exist on the analysis of the user needs in terms of tourism statistics. Most papers only assume that the findings of their study will have some policy implications.

Ms. **Yumi Yamaguchi,** Vice Commissioner, Japan Tourism Agency, Mr. **Shogo Arai,** Governor, Nara Prefecture, Mr. **Alain Dupeyras**, Head of Tourism, OECD, and Mr. **Christophe Demunter**, Head of the tourism statistics team, Eurostat, provided concluding remarks. All underlined the importance of the Global Forum to bring together policy-makers, industry and experts in the field to drive forward the agenda, and help provide the necessary evidence to grow tourism wisely and contribute to sustainable economic growth.