

10 Years of Joint Projects by JR Hokkaido and Danish State Railways

Takashi Nagano

Introduction

JR Hokkaido and Danish State Railways (DSB) first established official cooperative ties in 1990 and the following 10 years have seen a variety of exchange activities including meetings between managers, courtesy visits to each other's facilities, exchange of personnel for training, etc. Danish State Railways has a well-deserved reputation for design excellence and a major part of the cooperative ties between JR Hokkaido and DSB involved joint design of three stations as well as new rolling stock—a first for a Japanese railway company—explained in more detail below.

In 1997, DSB expressed an interest in an exchange of information on JR Hokkaido's on-time operations know-how, leading to the launch of the Regularity Project in October 1999.

The Railway Friendship Agreement

The first steps towards cooperation between JR Hokkaido and DSB began in 1989 when both companies realized that establishing close ties would promote each other's development, especially because both companies are similar in terms of route-km, number of stations and staffing levels (Table 1). This is not surprising because Hokkaido and Denmark are similar in terms of climate, population, economy and agriculture. As a result, the two companies signed a friendship agreement in 1990 to promote stronger ties. Mr Ohmori, the President of JR Hokkaido at that time, stressed that he wanted the agreement to be more than just a ceremonial arrangement without substance. He said it should 'stimulate exchange between personnel from both

companies, permitting each side to learn from the strengths of the other for the benefit of both'.

Similarly, Mr Langager, Director General of DSB at the time, expressed the hope that the similarities between Denmark and Hokkaido would form common ground on which to build a mutual understanding of each other's living conditions and business environment.

Areas of Cooperation

The two railways decided to cooperate primarily in exchange of management ideas and in design. The former has been accomplished mainly through discussions between top managers and by sending trainees to each other's company. The latter was an obvious choice because DSB's design excellence is world famous. In addition



Modern automatic ticket gates at Chitosekuko Station

(JR Hokkaido)

to helping JR Hokkaido develop some exciting ideas for station buildings and rolling stock, exchange of design ideas has also raised the aesthetic awareness of staff and improved the company's corporate image.

Exchange of Management Ideas

Top managers from DSB and JR Hokkaido have held six meetings since 1989—four in Sapporo and two in Copenhagen—to exchange information and views and to decide upon future ways to cooperate. But the exchanges have not been limited to meetings of top managers. Since 1998, JR Hokkaido has been sending staff members to DSB where they have visited Copenhagen's Central Station, the IC3 Maintenance Centre, and other facilities to obtain a better understanding of railway operations in Denmark.

Table 1 Comparison of DSB and JR Hokkaido

	DSB (1998)	JR Hokkaido (1999)
Number of staff	10,922	10,300
Number of stations	294	477
Route-km	2,029	2,499.8
Passenger-km (million)	53.91	36.76
Number of passengers (million)	149.19	124.54
Number of carriages (excluding freight wagons)	1,341	1,114

Completed Design Projects

The first joint design project undertaken by JR Hokkaido and DSB was Chitosekuko Station serving Sapporo's Chitose Airport opened in 1992. The basic design concept highlights the climate and natural

features of Hokkaido, and gives users the impression that the station is above ground, although it is not. The white, blue and red colour scheme is really impressive. The white represents the sunny Hokkaido sky, the blue represents the same sky at night, and the red provides a sense of warmth and equilibrium. The



Open panoramic views from upper levels of Otaru Chikko Station

(JR Hokkaido)

art of the world-famous Danish graphic designer Per Arnoldi creating an image of a northern country is displayed on seven walls in well-frequented locations, such as the concourse and entrances. The impressive design has won two design awards—a Brunel Award Commendation and a Station Architect Award.

The second joint design project was the Otaru Chikko Station building opened in 1999 and serving the port city of Otaru, a popular tourist destination. The station

was completely refurbished to coincide with the opening of the adjoining Mycal Otaru, a large multi-purpose commercial centre. The design uses glass for the upper levels to create an impression of transparency and openness. In contrast, the lower part uses concrete to enhance the impression of solidity, and to remind one of the city's old-fashioned stone warehouses. The design won a commendation from the Association of Railway Architects.

Joint design of new rolling stock for JR Hokkaido's Soya Line

In 1998, engineers from both companies worked together on the design of Series 261 pendulum DMUs for JR Hokkaido's Soya Line (Wakkanai–Asahikawa). The new *Super Soya* limited-express operations started in March 2000 (see Photostory on p. 59). JR Hokkaido was already using pendulum DMUs to reduce travel times between urban centres and the new Series 261 design adopted the same principle.

Because the development time and budget were limited, the work was divided between the two companies with three designers from DSB and three JR Hokkaido engineers specializing in rolling stock design. JR Hokkaido took charge of basic design, especially the carriage layout, structure, interior fixtures, and nose configuration. DSB presented proposals for the interior colour coordination, materials, car seat design, and livery. The team decided to use wood to highlight the carriage interior walls, leather for Green Car (first class) seat coverings, cobalt blue for ceilings, and various seat colours in different carriages.



Series 261 *Super Soya* Pendulum DMU

(JR Hokkaido)



Danish-style interior of Green Car

(JR Hokkaido)

Ongoing Projects

Joint design of Hakodate Station building

DSB architects arrived in September 1998 and 1999 for 2 months to participate alongside JR Hokkaido architects in the joint design of the new Hakodate Station building, which is scheduled to open in 2003.

Hakodate Station is a landmark of Hakodate City, and its new look is expected to stimulate redevelopment and revival of the station area. The new building is a gateway to many destinations, and will serve as a symbol for Hakodate itself—an international city dedicated to education and culture. DSB

designers put great importance on harmony with urban surroundings, ensuring that their designs blend in well with the neighbouring architecture. Their work on this project respects these principles. Construction is scheduled to begin in 2001 and the project members are presently continuing their work on the interior design.

This type of major joint design work requires considerable time and JR Hokkaido and DSB project members have come to understand each other well over the months and years. This type of exchange clearly embodies the spirit of Mr Ohmori, now JR Hokkaido's Chairman.

Regularity Project

On 13 October last year, Mr Norgaard, DSB Head of Operations, visited JR Hokkaido with five DSB staff to participate in a 4-day workshop on the Regularity Project. The DSB delegates were given information on compiling train diagrams, rolling stock scheduling, and crew rostering. They also observed a training session and accident-prevention exercises. On 15 October, Mr Sakamoto, JR Hokkaido President, hosted a get together where he expressed the hope that the DSB delegates would achieve worthwhile results and that the personal ties formed through the railways' friendship would deepen.

Mr Norgaard said that the friendship between DSB and JR Hokkaido had made it possible for personnel from the two companies to benefit greatly from exchange of information and expressed his hope that the Regularity Project would be continued and concluded successfully in 2000. He proposed that JR Hokkaido staff visit DSB during the second stage of the project to observe rail operations in Denmark firsthand, to offer advice, and to participate in compiling train diagrams.

The project's third stage will see DSB staff visit JR Hokkaido again this year.

Future Cooperation

JR Hokkaido was formed in 1987 when Japanese National Railways (JNR) was privatized and split up. In the ensuing 13 years, the company has been providing the citizens of Hokkaido with safe and punctual intercity and local railway services. It has also vigorously promoted railway-related projects, such as extensive development of Sapporo Station's south exit, and development of areas around stations in Asahikawa, Hakodate and other regional cities. The company has been focusing its activities in several sectors, including tourism, local development, and bus operations.

Similarly, DSB was a state-owned railway, but began restructuring in 1993. Its bus and ferry operations were placed under separate management in 1995 and then its infrastructure was placed under the independent Banestryelsen (Danish National Railway Agency) in 1997. Other major reforms in January 1999 transformed DSB into an independent public corporation with responsibility for operating passenger and freight trains, and running stations.

In other words, the new DSB is no longer a state railway under direct control of the government. In this sense, it is similar to JR Hokkaido but it differs in a number of ways—it does not own any infrastructure; its operations are determined by an

annually reviewed contract with the government; and government policy now permits open access to the transport market by third parties. Consequently, DSB operates in a competitive business environment.

Although both JR Hokkaido and DSB have seen major changes in their business environments since they signed their friendship agreement 10 years ago, the ties between them have grown stronger. JR Hokkaido hopes that the next 10 years of cooperation will continue bringing friendship and business rewards for both companies. ■



Takashi Nagano

Mr Nagano is Senior Executive Director and General Manager of JR Hokkaido General Planning Headquarters. He joined JNR in 1965 after graduating from the Faculty of Law at the University of Tokyo.