



# CARRIAGE PLAN 2006-11

## **INTRODUCTION**

This plan outlines the plans for maintaining the existing carriage fleet used by the Swanage Railway Company and how commercial and other needs may shape this in the coming years.

In line with the Railway's Strategic Plan these activities are to be undertaken within the context of developing the Railway's Safety culture and its ambience of the Southern Region branch line of the 1950s/ early 1960s.

As part of the Strategic Plan the Carriage Plan takes into account the following objectives:

### **MARKETING**

- Continue to review Disabled access to railway facilities.

### **LOCOMOTIVE, CARRIAGE AND WAGON**

- Development of Locomotive and Rolling Stock plans to ensure availability of appropriate vehicles for services.

### **STAFF AND FACILITIES**

- Continue to develop the volunteer workforce by concentration on both recruitment and retention.

## **FUNDING THE PLAN**

Routine maintenance issues contained in the plan will be financed from revenue and funds for this purpose will be allocated through the annual spending plan and budget process. All projects that result in new or improved facilities (from their 2005 condition) will need to obtain a source of funding. Such sources include:

- SRCL reserves;
- Grants from SRT;
- Grants from external bodies.

Allocation of funding for projects will take place following the submission of a Project Form to the Board of Directors. This supports the process by which a project is managed and controlled.

In addition to funding the enhancements listed in this plan SRCL and SRT will work together to fund the overhaul and return to traffic of selected historic vehicles in the ownership of the SRT.

## **COMMERCIAL REQUIREMENTS**

The peak requirement needs the following sets of coaching stock:

- 5 coach service set with buffet
- 5 coach service set without buffet
- 5 coach dining set
- 2 coach set for driving experience and special event use
- 1 spare passenger coach to allow for work in hand
- 1 spare brake coach to allow for work in hand

It is suggested that a spare brake coach is maintained due to the critical nature of these vehicles for operations.

In line with the need to cater more fully for disabled travellers it is proposed to investigate the cost of refurbishing the existing Disabled Coach SK(H) 24127 during 2008. If SK 25464 were also overhauled this would provide enough coaches to have a spare four coach set available for use which would ease maintenance schedules during the peak period and provide an additional degree of back-up should a major failure occur.

## MAINTENANCE

Maintenance is scheduled to take place on a regular basis and is undertaken entirely by SRCL staff. The following schedule is maintained based on BR specifications.

Examination	Maximum exam Interval		Sequence
	Periodicity		
	Working Days	Calendar	
Daily	1		Sequence Is dependant upon utilisation
Weekly	7	1 Month	
4 (CMSI23)	36	3 Months	
7 (CMSI23)		6 Months	

Vehicles will be lifted annually for examination of top and bottom centre casting pivots.

To cater for the six-week period of peak operation the monthly examinations in July/August take place immediately before and after this period resulting in a slightly longer period between examinations than is desirable. Given the mileages concerned this is not deemed a matter for concern. Full details are contained in the LCW section of the SMS.

## HEAVY REPAIR AND OVERHAUL

SRCL will undertake overhauls of the coaching stock in its care to ensure that it remains safe and in a state suitable for use. It is planned that all carriages will undergo a thorough overhaul every 10 years. SRCL is currently unable to undertake this work cost-effectively in-house and it is therefore undertaken off-site by contractors. In addition, an Intermediate Overhaul is planned halfway between General Overhauls. Intermediate Overhauls are planned to take place at Swanage. Full details are contained in the LCW section of the SMS.

### 5 years **Intermediate Overhaul**

Body & roof repairs and re-paint  
Internal heavy clean, repairs as required  
Overhaul of bogies  
Examination of Vacuum brake system – repairs as required

### 10 years **General Overhaul**

#### Body

Sheeting repairs to body sides, ends and roof  
Frame corrosion repairs at ends, door frames and body  
Repair and overhaul of doors, fittings, locks; adjust doors  
Repairs as required to windows and ventilators  
Repaint body and roof

#### Interior

Seating re-trim as required  
Repairs as required to; seating, tables, doors, panels, flooring, fixtures and fittings, toilets  
Clean or paint ceilings  
Varnish or paint vestibules, window frames, heater grilles, guards and luggage compartments

#### Bogies and Under frame

Examination of under frame and attachments – repairs as required  
Removal of wheel sets, repairs as required  
Check springs & components  
Axle boxes exam  
Adjust suspension and ride – heights

#### Brakes, gangways and running gear

Overhaul of vacuum brake cylinder, DA & PCA valves, where fitted overhaul of air brake system  
Repair of gangway faceplates and plunger bushes  
Repairs as required to; buffers, draw gear and couplers, electrical system

In addition to this overhaul schedule coaches may require repainting at more frequent intervals given the outside storage and seaside nature of the air.

There is still a need to develop a full plan for the overhaul of bogies. This currently takes place as required. It is hoped that we will be able to develop the skills to overhaul and maintain enough spare bogies that we can have a pair of each type of bogies stored in serviceable condition for use as required.

## CARRIAGE ELECTRICS

Over the past 5-10 years a policy has been in place of fitting vehicles with a 240-volt charging system and in 2006 it is expected that the remaining unreliable 24-volt battery chargers can be taken out of use with all charging taking place from the 240-volt cables. There are still some vehicles that require final fitting out of lighting systems and these vehicles are not in public use during periods of darkness.

## ELECTRIC TRAIN HEATING

Some coaches have equipment remaining and it is proposed to gradually reinstall ETH in a number of coaches for use during colder weather when steam locomotives are not being used. It is hoped that one service set and the dining set can be so equipped. This process will take place on a gradual basis.

## AIR BRAKING

Whilst all carriages are equipped with vacuum brakes there are a small number of vehicles still fitted with air brake equipment. As work is done to these coaches this equipment will be maintained so that, should it be required at a later date, it will be practical to commission this equipment with a minimum amount of work. This process will take place on a gradual basis.

## HERITAGE COACHES

The Swanage Railway Trust is currently overhauling the first of the heritage fleet and it is hoped that this will be entering service within the next year (subject to fundraising). Yet to be resolved are issues such as running agreements between SRT and SRCL. This will dictate whether these vehicles are treated as part of the running fleet or kept aside for special use. It is also important to recognise where funding for future work is going to be sourced for incorporation in running agreements.

## STAFFING

Most routine maintenance is undertaken by a small group of paid staff (shared with Locomotive maintenance) supplemented by a small, but valuable, number of volunteers. Within the staff available there is expertise in bodywork, carpentry, electrical and mechanical work.

Most of the more major work is undertaken by the volunteer workforce at weekends assisted as required by the paid staff. This group undertakes, together with the paid staff, work up to the level of intermediate overhauls. It is hoped that the scope of work undertaken can be widened to include the preparation of some of the heritage coaches for use.

Volunteers are encouraged within the department and there is a Volunteer Co-ordinator who organises work for most weekends and an annual Carriage Working Week. Most work during the week focuses on routine maintenance of running vehicles. The railway has an active programme of training staff which includes the provision for both off-site and on the job training as best fits commercial and personal development needs.

## FACILITIES

The facilities available at Swanage are far from ideal and work is starting on identifying future needs for carriage maintenance along side the requirements for both steam and diesel locomotive maintenance.

## SEATING CAPACITY OF VARIOUS FORMATIONS

	4 coaches				5 coaches				6 coaches				Dining Set
	3 TSO	2 TSO+RMB	2 TSO+SK(H)	TSO+RMB+SK(H)	4 TSO	3 TSO+RMB	3 TSO+SK(H)	2 TSO+RMB+SK(H)	5 TSO	4 TSO+RMB	4 TSO+SK(H)	3 TSO+RMB+SK(H)	
<b>BSK</b>	224	204	192	172	<b>288</b>	<b>268</b>	256	236	-	-	-	-	82 + 32
<b>BSOB</b>	223	203	191	171	287	267	<b>255</b>	235	-	-	-	-	82 + 33
<b>BCK</b>	222	202	190	170	286	266	254	234	-	-	-	-	82 + 30
<b>BG</b>	192	172	160	140	256	236	224	204	320	300	288	268	82 + 0

	Vehicle	Last repaint	Repaint due	Last Gen. O'haul	Gen. O'haul due	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Owner	Description	Capacity
CATERING	1865 RMB	NIS	NIS	NIS	NIS	NOT IN SERVICE										Private	Buffet Car.	44
	1885 RMB	Jun-01	Jun-06	Oct-93	Oct-03 Overdue	INT.		INT.		INT.		INT.		INT.		Consort	Buffet Car.	44
	1937 KITCH	Dec-04	Dec-09	Apr-01	Apr-11	INT.					G. O.					SRCL	Kitchen Car - staff use	0
	347 PULL	Sep-04	Sep-09	Sep-04	Sep-14				INT.					G. O.		SRCL	Dining Car.	42
	3090 FO	Mar-04	Mar-09	Mar-04	Mar-14			INT.						G. O.		SRCL	Dining Car.	42
	4055 BAR	Apr-05	Mar-10	Intermediate Apr-05	Apr-10			G. O.						INT.		SRCL	Bar Car with circulating area.	Standing room only
	4803 SO	Apr-03	Apr-08	NIS	NIS	NOT IN SERVICE						G. O.			SRCL	Dining Car.	42	
	BRAKE	9015 BSOB	Jul-01	Jul-06	Not Known	Nov-06	G. O.				INT.					G. O.	SRCL	Brake Coach with disabled facilities.
21205 BCK		Nov-03	Nov-08	Nov-03	Nov-13					G. O.					INT.	SRCL	Brake Coach with limited disabled	30
35059 BSK		Nov-04	Nov-09	Nov-04	Nov-14		INT.					G. O.				Cons/ SRCL	Brake Coach with limited disabled	32
35464 BSK		Jun-99	Jun-04 Overdue	Not Known	Sep-06	G. O.					INT.					SRCL	Brake Coach with limited disabled	32
81410 BG		Jan-06	Jan-11	Apr-06	Apr-16					INT.					G. O.	SRCL	Full brake coach.	0
PASSENGER		4349 TSO	Jul-05	Jul-15	Jul-01	Jul-11				G. O.					INT.		SRCL	Open seating coach.
	4416 TSO	Oct-04	Oct-09	Oct-04	Oct-14	INT.					G. O.					SRCL	Open seating coach.	64
	4842 TSO	Mar-04	Mar-09	Mar-03	Mar-13					G. O.					INT.	SRCL	Open seating coach.	64
	4899 TSO	Not known	Not known	Not known	Nov-06		G. O.					INT.				Cons/ SRCL	Open seating coach.	64
	4945 TSO	Mar-04	Mar-09	Mar-04	Mar-14				INT.				G. O.			Cons/ SRCL	Open seating coach.	64
	4961 TSO	Mar-05	Mar-10	Mar-05	Mar-15				INT.					G. O.		SRCL	Open seating coach.	64
	4981 TSO	Aug-01	Aug-06	Not known	Apr-07		G. O.					INT.				Private	Open seating coach.	64
	4983 TSO	Dec-02	Dec-07	Dec-02	Dec-12				G. O.						INT.	SRCL	Open seating coach.	64
	24127 SK(H)	NIS	NIS	NIS	NIS		N.I.S.	G. O.						INT.		SRCL	Converted area for wheelchairs.	24 + 8 wheelchairs.
	SRT	728 TK	NIS	NIS	NIS	NIS	NOT IN SERVICE										SRT	Compartment seating
1381 TO		NIS	NIS	NIS	NIS	NOT IN SERVICE										Private	Open seating coach.	56
1457 TO		NIS	NIS	NIS	NIS	NOT IN SERVICE										SRT	Open seating coach.	64
4365 BTK		NIS	NIS	NIS	NIS	G. O.					INT.					SRT	Semi open brake	48
4366 BTK		NIS	NIS	NIS	NIS	NOT IN SERVICE										SRT	Semi open brake	48
5761 CK		NIS	NIS	NIS	NIS	NOT IN SERVICE										Private	Compartment seating	56
6699 BCK		NIS	NIS	NIS	NIS	NOT IN SERVICE										SRT/ DLL	Brake coach.	32
25424 SK		NIS	NIS	NIS	NIS	NOT IN SERVICE										SRT	Compartment seating	64