Subject to priorities defined by the Technical Council and the Presidium, the results of *fib*'s work in Commissions and Task Groups are published in a continuously numbered series of technical publications called 'Bulletins'. The following categories are used:

category	minimum approval procedure required prior to publication
Technical Report	approved by a Task Group and the Chairpersons of the Commission
State-of-Art Report	approved by a Commission
Manual, Guide (to good practice) or Recommendation	approved by the Technical Council of <i>fib</i>
Model Code	approved by the General Assembly of <i>fib</i>
Any publication not having me	et the above requirements will be clearly identified as preliminary draft.

This Bulletin N° 71 was approved as an *fib* State-of-Art Report by *fib* Commission 3 in September 2013.

This report was drafted by Task Group 3.7, *Integrated life-cycle assessment of concrete structures*, within *fib* Commission 3, *Environmental aspects of design and construction*:

Petr Hájek\* (Convener, Czech Technical University in Prague, Czech Republic)

Andrzej B. Ajdukiewicz (Silesian Technical University, Poland), Jan Desmyter (Belgian Building Research Institute, Belgium), Ctislav Fiala\* (Czech Technical University in Prague, Czech Republic), Julie Hodková (Czech Technical University in Prague, Czech Republic), Birit Buhr Jensen\* (Dong Energy, Denmark), Sivakumar Kandasami (L&T Construction, India), Ivana Laníková\* (Brno University of Technology, Czech Republic), Takafumi Noguchi (University of Tokyo, Japan), Mats Oberg (NCC Construction Sverige AB, Sweden), Koji Sakai (Kagawa University, Japan), Petr Štěpánek (Brno University of Technology, Czech Republic)

\* Main authors

Contact details of Task Group members can be found in the members only section of the *fib* website, www.fib-international.org.

Cover image: Basic principle of integrated design approach (see Fig. 2.2.3).

© fédération internationale du béton (fib), 2013

Although the International Federation for Structural Concrete fib – fédération internationale du béton – does its best to ensure that any information given is accurate, no liability or responsibility of any kind (including liability for negligence) is accepted in this respect by the organisation, its members, servants or agents.

All rights reserved. No part of this publication may be reproduced, modified, translated, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from *fib*.

**First published in 2013 by the International Federation for Structural Concrete** (*fib*) Postal address: Case Postale 88, CH-1015 Lausanne, Switzerland Street address: Federal Institute of Technology Lausanne - EPFL, Section Génie Civil Tel +41 21 693 2747 • Fax +41 21 693 6245 fib@epfl.ch • www.fib-international.org

ISSN 1562-3610 ISBN 978-2-88394-111-3

Printed by DCC Document Competence Center Siegmar Kästl e.K., Germany