Preface		
21st Century Revolution of Military Affairs and Demands for the German Armed Forces Henning Otte, Member of the German Bundestag and Defence Policy Spokesman of the CDU/CSU-Parliamentary Group	3	
Forewords		
Armed Conflicts Will Continue to Be Resolved on the Ground! Lieutenant General Jörg Vollmer, Chief of Staff, German Army	6	
Personnel, Training and Effective Equipment – Key Elements of Military Capabilities Wolfgang Köpke, Major General (ret´d.) President of the Association of the German Army (Förderkreis Deutsches Heer e. V FKH)	9	
Mission and Capabilities		
The Bundeswehr Capability Profile – A Driving Force of Innovation and Digital Transformation of the Armed Forces Edgar Behrends	10	
Outlook on Division 2027 Michael Schlechtweg, Elmar Schulz	13	
Future Challenges of the Bundeswehr Medical Service in International Crisis Management and in National/Collective Defence Sascha Peter Bös, Sebastian Fricke, Matthias Marth, Dr. Anna Grella	18	
Armament Projects Land Forces		
Equipment Planning in the German Army 2019 – Situation and Outlook Stefan Klein	22	
Equipment Projects of the Joint Support and Enabling Service – Projects Having a Leverage Effect on the Capability Profile of the Bundeswehr Michael Grintz	27	
Protection and Mobility		
Protected and Unprotected Vehicles of the Bundeswehr Gerhard Heiming and Michael Horst	32	
Comprehensive Perimeter Protection on Land, Water and in the Air Securiton GmbH	37	
Short and Very Short Range Air Defence: A Long-term Air Force Analysis Mateo Osterhagen-Zalles, Marcel Szalai, Helge Weyman	39	
The Future of Germany's Integrated Air & Missile Defense Interview with Bruce R. Eggers, Business Development Director for German Integrated Air and Missile Defense, Raytheon International	20 8	
Command and Control	Tinl an	
Digitisation of Land-Based Operations Dirk Paul	de45elopi	
One-stop information and communication ATM ComputerSysteme GmbH	49	
First Mile Mobility Dorothee Frank	50	
Rohde & Schwarz enables networked centric operations by modern communications architectures Rohde & Schwarz GmbH & Co. KG	54	

Reconnaisance	
Heron 1 in Mali – A Success Story Continues Volker Jansen	56
The latest generation of combat vehicles: Lethal, survivable, mobile, digitised, networkable Rheinmetall AG	58
Effects	
The Puma AIFV – The Optimum Asset for the Mechanised Infantry Today and Tomorrow Mark Mozer	61
MELLS (Spike LR) – State-of-the-art Guided Missile Weaponry for the Puma EuroSpike GmbH	65
Safety Seat Systems – Integral component of the overall Puma AIFV safety concept AUTOFLUG GmbH	67
More Punch for the Boxer Christoph Jehn FFG Flensburger Fahrzeugbau Gesellschaft mbH	68
The Advancement of the Tiger Attack Helicopter André Forkert	70
The Future Infantryman System – Current Status and Procurement Plans Team of authors, BAAINBw Branch U5.5	76
Procurement of the Shoulder-launched Guided Weapon "Wirkmittel 1800+" is Close to Decisions André Forkert	79
Support	
WiSENT 2 – One Platform for Multiple Missions Christoph Jehn FFG Flensburger Fahrzeugbau Gesellschaft mbH	81
The Medium Protected Medical Evacuation Vehicle Klaus Krickl	83
Future Trends	
NH90 – Current Status and Further Planning Team of authors, BAAINBW, Branch L8	86
The Final Round – The German Heavy Transport Helicopter Project Enters its Final Stages Ulrich Renn	88
Hyperwar – New Challenges for Army Development Thomas Doll, Uwe Beyer, Thomas Schiller	91
Artificial Intelligence – Cyber and Information Domain System and Capabilities – Status and Way Ahead Matthias Frank	96 Object

Imprint

Defence Technology Review 4/2019 September 2019

Publishing House:

Mittler Report Verlag GmbH Bonn, Germany a company of the Tamm Media Group



Managing Directors:

Dr. Peter Bossdorf Thomas Bantle Peter Tamm

Director of Marketing:

Jürgen Hensel

Managing Editor:

Michael Horst

Editorial Team:

Gerhard Heiming Dorothee Frank Christina Langer Lothar Schulz

Translation:

Context GmbH, Bundes sprachen amt

CREATIV.CONSULTING GmbH, Germany

Office address:

Mittler Report Verlag GmbH Baunscheidtstraße 11, D-53113 Bonn Phone: +49(0)228 35 00 870 Fax: +49(0)228 35 00 871 E-Mail: info@mittler-report.de Web: www.mittler-report.de

Subscription/Reader Service:

PressUp GmbH, Postfach 701311, 22041 Hamburg
Phone: +49(0) 40 - 38 66 66 - 0 Fax: +49(0) 40 - 38 66 66 - 299 E-Mail: mittler-report@pressup.de

Advertising Management: Waldemar Geiger

Director Marketing and **Business Development** Mittler Report Verlag GmbH Baunscheidtstraße 11 D-53113 Bonn Telefon: +49 (0) 228 3500887 waldemar.geiger@mittler-report.de

Lehmann Offsetdruck GmbH 22848 Norderstedt, Germany

Single Copy Price: 14.80 Euro (shipping not included)

Pictures/Illustrations:

Authors, unless otherwise referenced

Copying of any part of this publication without the express authorisation by the publisher is prohibited.