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Nota di contenuto	Preface; Foreword; Contents; Figures; Tables; Summary; Acknowledgments; Glossary; CHAPTER 1- INTRODUCTION; The Global Technology Revolution to 2020; Approach; Structure of the Report; CHAPTER 2- TECHNOLOGY APPLICATIONS AND THEIR EFFECTS; Technology Trends and Applications; The Integrated Effect of Technology Development; The Potential Effects of Technology Applications in 2020; Summary of Technology Applications; CHAPTER 3- INTERNATIONAL VARIATION IN TECHNOLOGY APPLICATIONS AND IMPLEMENTATION; Regional Variation of Technology Application and Implementation Drivers and Barriers to Implementing Technology Applications Problems and Issues and Relevant Technology Applications; Country Capacity to Acquire Technologies and Drivers, and Barriers to Implementing Technology Applications; Determining Country Capacity to Implement Technology Applications Relevant to Problems and Issues; Summary of Country Capacities for Technology Implementation; CHAPTER 4- CONCLUSIONS; Accelerated Technology Development Will Continue; Capability and Need Differences Are Driving Global Technology Revolution Differences Around the World Public Policy Issues May Strongly Influence Technology Implementation Maintaining Science and Technology Capacity Requires Consideration

and Action; Capacity Building Is an Essential Component of Development; Public Policy Issues Relating to Technology Applications Will Engender Strong Public Debate; APPENDIX A: BIOTECHNOLOGY, BIONANO TECHNOLOGY, AND BIOMEDICAL SCIENCE TRENDS TO 2020; APPENDIX B: NANOTECHNOLOGY TRENDS TO 2020; APPENDIX C: MATERIALS SCIENCE AND ENGINEERING TRENDS TO 2020; APPENDIX D: INFORMATION TECHNOLOGY TRENDS TO 2020 APPENDIX E: CREATING NEW OPPORTUNITIES FOR IMPROVING EXISTING THERAPEUTICS: NANO-ENABLED DRUG DELIVERY SYSTEMS TRENDS TOWARD 2020 APPENDIX F: TECHNOLOGY AND TERRORISM; APPENDIX G: SECTORAL IMPACTS OF TECHNOLOGY APPLICATIONS; APPENDIX H: INDEX OF SCIENCE AND TECHNOLOGY CAPACITY; APPENDIX I: 2005 FREEDOM RATING FOR 29 SELECTED COUNTRIES; APPENDIX J: HDI RANK, SCORES, AND DEVELOPMENT INDICATOR STATISTICS FOR 29 SELECTED COUNTRIES; APPENDIX K: KNOWLEDGE ASSESSMENT (UNWEIGHTED) FOR SELECTED COUNTRIES, RANKED BY INNOVATION SCORES; References

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Sommario/riassunto

In 2020, areas of particular importance for technology trends will include biotechnology, nanotechnology, materials technology, and information technology. This report, the companion document to The Global Technology Revolution 2020, Executive Summary (Silberglitt et al., MG-475-NIC, 2006), assesses in detail a sample of 29 countries with respect to their ability to acquire and implement 16 key technology applications.

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