



University of Wales
Trinity Saint David
BIRMINGHAM

Erika Stecca

Student number: 2314517

Course title: Project Management

Module: LCBB6006

Contents

Introduction, Purpose and Aims	3
1.Turnkey Contracting	3
2. Multicontract Approach	4
3. Do-It-Yourself (DIY) Contracting	4
4.Multicontract + Do-It-Yourself (DIY) Contracting	5
Summary Table	6
Comparative Analysis of the Four Methods.....	7
Strategic Considerations in Choosing a Contracting Method.....	7
Conclusion	8
Reference.....	9

Introduction, Purpose and Aims

Project management (PM) is essentially the disciplined use of knowledge, skills, tools and techniques aimed at steering project work, toward defined goals while organizing the limits—time, budget, quality and scope (PMI, 2021). In today's landscape initiatives have adapted into strategic levers for hitting organisational objectives especially across sectors, like construction, engineering, information technology and large-scale infrastructure. Contracts act as the glue that spells out each party's duties keeps everyone answerable and helps keep disputes at bay. It serves as a governance framework that shapes how work is envisioned carried out and overseen (Kerzner, 2022).

The aim of this essay is to explore the four core contracting approaches that drive project management:

- 1. Turnkey contracting**
- 2. Multicontract approach**
- 3. Do-It-Yourself (DIY) contracting**
- 4. Multicontract + DIY contracting**

The essay sets out to define each of these methods spell out their characteristics and weigh their advantages and disadvantages across a range of project contexts. It will also evaluate how suitable each method is, for project types and, for organizational strategies.

1. Turnkey Contracting

The turnkey contracting method provides clients with a fully operational facility because one contractor or consortium handles all stages from design to construction and testing and commissioning (Lock, 2020). The method produces its highest performance for big infrastructure and industrial and energy projects because it lets clients stay out of project management work while the contractor fulfils all requirements within set time and budget constraints (Walker and Rowlinson, 2019). The turnkey contract offers clients a single point of contact and streamlined administration and fixed pricing and specific deadlines and complete responsibility for project risks to the contractor (Kerzner, 2022). The EPC delivery of power plants and hospitals and other ready-for-use facilities uses turnkey contracts as their primary contracting method.

The turnkey contracting method becomes fixed after contract execution which limits client design options and generates possible disputes (Lock, 2020). The costs of turnkey projects become more expensive because contractors add reserve funds to protect against major project risks (RDash, 2024). The client needs to give up control over design decisions and quality expectations when using turnkey contracts because the completed product will meet contract specifications but might not address all user requirements (Kerzner, 2017). The turnkey method delivers its best results for projects that need specialized knowledge and need to produce consistent outcomes including power stations and solar farms and hospitals and water treatment facilities and airports (Hosie, 2007).

2. Multicontract Approach

Project owners who use the multicontract approach establish individual contracts for different project sections or stages which enable specialist contractors to handle design work and civil construction and mechanical installation and electrical system implementation and commissioning (Lock, 2020). The project team needs to work with clients to establish when each enforcement schedule will become active. The method delivers optimal results for complex large-scale infrastructure and industrial construction projects that require specialized expertise such as airport and highway and petrochemical facility development (Winch, 2012).

The method enables clients to maintain complete total control over their contractors and design work and project scope modifications which leads to better performance and higher quality results (Kerzner, 2022). The method decreases expenses because it removes the requirement to pay subcontractors and risk-based fees which enable fast project completion through team-based work (PMI, 2021). A university campus project can achieve fast high-quality results through separate firm engagement for design work and construction and installation and landscaping services to access specialized expertise.

The management of multicontract projects faces major obstacles because their complex project structure. Multiple contractors create communication problems which cause projects to become delayed and lead to disputes according to Winch (2012). Clients must take full responsibility for project management duties and risk management because they need to enforce contracts and monitor everything (Kerzner, 2022). The lack of defined task limits between project sections led to construction delays in railway development because bridge and tunnel construction projects extended the time needed for track installation and created payment disputes (J Rodney Turner, 2014).

The multicontract method suits projects that need client supervision of design work and cost management and quality control for big complex public sector and manufacturing and IT integration initiatives. Airport construction projects achieve better results through separate firm assignments for consulting services and civil construction and baggage system installation and electrical system implementation to maintain project control and deliver specialized high-quality outcomes (Walker and Rowlinson, 2019).

3. Do-It-Yourself (DIY) Contracting

The Do-It-Yourself (DIY) contracting method lets clients perform most project work independently until they require professional help for specific needs (Kerzner, 2022). The method suits organizations that possess enough technical expertise and management abilities and resources to execute small to medium projects including facility renovations and IT installations and minor construction work (Winch, 2012).

The DIY method allows clients to direct all aspects of their project including design and timeline and scope without requiring contractor involvement (J Rodney Turner, 2014). Organizations can decrease their expenses through DIY approaches because they remove contractor payment requirements and enable direct material procurement (PMI, 2021). The internal development of staff skills occurs through their involvement in DIY projects which provide them with technical and managerial experience (Walker and Rowlinson, 2019). A university can perform student housing renovations through its maintenance team to handle planning and

procurement and construction management which results in cost savings and high-quality results.

Organizations encounter various obstacles when they decide to develop their own solutions for their requirements. Organizations need to possess sufficient expertise and resources because insufficient capabilities will lead to delayed projects and higher costs and lower quality results (Lock, 2020). The clients bear complete responsibility for project risks because they must handle all safety problems and procurement delays and technical system breakdowns (Kerzner, 2022). The distribution methods for resources used in DIY work generate operational problems which affect fundamental business operations (Winch, 2012). Municipal maintenance work performance deteriorates because staff members do not possess construction skills and essential tools.

The DIY approach suits projects that need complete client management of costs and performance and scheduling requirements for building maintenance and small architectural work and IT system updates and community development through local workforce utilization. The housing department operates with complete financial authority to execute unit renovation work based on their predetermined project timeline. The method produces unsuccessful results for complex hospital and industrial plant projects because these organizations need technical and management skills.

4.Multicontract + Do-It-Yourself (DIY) Contracting

The Multicontract + Do-It-Yourself (DIY) method allows clients to manage different external contractors for specific tasks while using their internal resources to perform complex project work (Kerzner, 2022). A university facilities team can direct project management activities and execute internal construction and equipment installation while contractors perform civil and electrical and HVAC work to achieve better results at lower expenses.

The method provides three main benefits because it reduces project expenses through reduced contractor dependence (Lock, 2020) and enables organizations to manage their internal work through external specialist collaboration for complex projects and employee skill development and professional expertise (PMI, 2021) and professional experience (Walker and Rowlinson, 2019). A city council can maintain control of essential operations by outsourcing road and drainage work to external contractors while performing landscaping and lighting and signage tasks internally.

The method contains multiple difficulties which need to be solved. The integration of internal teams with external contractors creates communication problems and scheduling conflicts and role ambiguity which extends project timelines and increases project costs (Winch, 2012). The combination of insufficient training and equipment with internal staff members results in poor quality work while their dual responsibilities between project tasks and regular duties create progress delays (Lock, 2020). Hospital construction projects experience delays because biomedical teams fail to match the pace of external contractors who finish structural and electrical work.

The Multicontract + DIY method delivers its best results for projects of medium to large size which operate in public and institutional environments. The method enables clients to monitor expenses during construction while they oversee building operations and build their internal

abilities and handle project risks and knowledge exchange. Organizations that include universities and city councils and industrial businesses should handle design coordination and landscaping and system integration tasks internally but should bring in specialized construction contractors for projects when they establish effective project management and communication systems (Walker and Rowlinson, 2019).

Summary Table

Contracting Method	Advantages	Disadvantages	Suitable Project Types / Examples
Turnkey	- Single point of accountability - High cost and time certainty - Reduced client management burden - Risk transferred to contractor	- Offers limited options for clients requiring personalized solutions - Requires a high initial investment from clients - Service design and quality standards are fixed, with no client ability to make changes	Large-scale industrial or infrastructure projects (e.g., power plants, hospitals, airports)
Multicontract	- Better control and more flexible project management - Potential for cost reduction - Enables clients to choose their preferred specialist contractors - Project schedule allows possible overlaps between different phases	- Complex coordination - High client risk and management demands - Potential for disputes at interfaces	Complex infrastructure or public works (e.g., airports, bridges, transport systems)
Do-It-Yourself (DIY)	- Full client control - Potential for cost reduction - Builds internal capacity - Enables agile decision-making	- Requires specialized knowledge to operate - Creates significant security risks - Diverts essential resources from core business activities	Small to medium projects (e.g., office renovations, IT infrastructure, maintenance works)

Multicontract + DIY	Provides cost-effective management and complete control Remains flexible and adapts to changing situations Promotes knowledge sharing between different units Reduces reliance on external organizations	Coordination complexity Risk of uneven quality Increased pressure on internal staff	Medium to large institutional or municipal projects (e.g., school city expansions, infrastructure upgrades)

Comparative Analysis of the Four Methods

The four contracting methods including Turnkey and Multicontract and Do-It-Yourself (DIY) and Multicontract + DIY provide unique benefits and drawbacks which match project needs. The selection between these methods depends on project dimensions and intricacy and danger factors and client proficiency with technology and their need for project management authority (Kerzner, 2022).

1. **Turnkey** solutions enable clients to maintain minimal involvement while ensuring high project expenses because the contractor takes full responsibility for budget excesses, project delays and technical problems (Lock, 2020). The method works best for complicated big projects yet restricts client authority to make design choices and adapt to changes.
2. **Multicontract** provides organizations with better control and flexibility and lower costs because of competitive bidding and enables them to pick experts for specific project areas (J Rodney Turner, 2014). The management of multiple contractors leads to increased interface risks and additional management complexities.
3. Organizations maintain complete control through **DIY** because they use their own resources to complete projects at lower expenses while developing their employees' competencies (Winch, 2012). The method demands advanced technical and managerial expertise because it suits only small projects with minimal complexity while making the client responsible for all project risks.
4. **The Multicontract + DIY** approach enables internal project control through external expertise according to Walker and Rowlinson (2019). The approach delivers cost and capability optimization yet creates coordination difficulties that result in variable project quality.

Strategic Considerations in Choosing a Contracting Method

The selection of an appropriate contracting method needs thorough assessment of multiple strategic elements:

1. Project Complexity and Size:

The Turnkey and Multicontract methods work best for big, complicated projects including airports and power plants because they need skilled workers and long periods of work (Lock, 2020). The DIY method works best for executing basic small-scale projects.

2. Client Capability:

The ability to manage client projects stands as a vital requirement because Turnkey benefits from restricted expertise yet Multicontract and DIY options work best for teams with sufficient capabilities (Kerzner, 2022).

3. Risk Appetite:

The client risk decreases through Turnkey contracts because they transfer all responsibilities to the contractor, but Multicontract and DIY options provide control and flexibility at increased risk levels (Winch, 2012).

4. Budget and Cost Control:

The fixed cost structure of turnkey contracts leads to elevated prices because of risk fees yet DIY and Multicontract approaches enable cost savings when properly supervised (Walker and Rowlinson, 2019).

5. Schedule and Flexibility:

The PMI (2021) indicates that Turnkey contracts work best for projects which need quick completion and reduced client participation yet Multicontract and DIY suits projects that need continuous work and flexibility.

Managers need to assess all project elements before selecting a delivery method because successful contracting requires methods that match project objectives and available resources and risk tolerance.

Conclusion

Organizations achieve better cost control and project scheduling and quality maintenance through their selection of suitable contracting methods which also help them handle risks and team operations. The turnkey method delivers its best results for big, complicated projects which need minimal client participation. The multicontract method provides clients who possess technical skills to gain better control over projects while obtaining potential cost reductions. Organizations that choose DIY project management can run their projects independently while developing their internal project management skills. Project managers need to evaluate project complexity together with risks and resources and goals to pick the best method for their project. Organizations use contracts as legal documents which provide financial protection and serve as strategic instruments to reach operational success.

Reference

EPC CONTRACTS IN THE ENERGY SECTOR. (2015). Available at: https://seelegal.org/wp-content/uploads/2017/08/KD246167-v1-EPC_Contracts_in_the_Energy_Sector.pdf [Accessed 27 Oct. 2025].

Hosie, J. (2007). *Article Turnkey Contracting under the FIDIC Silver Book: What Do Owners want? What Do They get?* [online] Available at: <https://www.fidic.org/sites/default/files/hosie07.pdf> [Accessed 27 Oct. 2025].

J Rodney Turner (2014). *The Handbook of project-based Management*. New York, London: Mcgraw-Hill.

Kerzner, H. (2022). *Project Management: a Systems Approach to planning, scheduling, and controlling*. 13th ed. S.L.: John Wiley & Sons.

Lock, D. (2020). *Project Management*. 10th ed. London: Routledge.

PMI (2021). *The Standard for Project Management and a Guide to the Project Management Body of Knowledge (PMBOK guide)*. 7th ed. Newtown Square, Pennsylvania: Project Management Institute.

RDash. (2024). *Turnkey Projects: Types, Advantages, Disadvantages & Example*. [online] Available at: <https://rdash.io/blog/turnkey-projects-types-advantages-disadvantages/> [Accessed 27 Oct. 2025].

Walker, D. and Rowlinson, S. (2019). *Routledge Handbook of Integrated Project Delivery*. Routledge.

Winch, G. (2012). *Managing Construction Projects: an Information Processing Approach*. Chichester; Ames, Iowa: Blackwell Pub.